REPORT RESUMES

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THE DEVELOPMENT AND EVALUATION OF THREE TYPES OF PHYSICAL EDUCATION PROGRAMS FOR EDUCABLE MENTALLY RETARDED BOYS. FINAL REPORT.

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THREE PHYSICAL EDUCATION PROGRAMS, SKILL-ORIENTED, PLAY-ORIENTED, AND FREE-PLAY ORIENTED WERE DEVELOPED. THESE PROGRAMS WERE EXAMINED, INITIALLY, BY SEVEN EXPERTS AND THEN SUBJECTED TO A PILOT STUDY. THE REVISED PROGRAMS WERE TAUGHT BY RESEARCH ASSISTANTS TO SIX EXPERIMENTAL GROUPS WHICH INCLUDED 82 BOYS AT TWO STATE SCHOOLS FOR THE MENTALLY RETARDED. THE INSTRUCTIONAL PERIOD WAS 39 CLASS HOURS (13 WEEKS) IN DURATION, EXCLUSIVE OF TIME TAKEN FOR PURPOSES OF EVALUATION. THE PROGRAMS WERE EVALUATED ON THE BASIS OF PRETESTS AND POST-TESTS WHICH ASCERTAINED ACHIEVEMENT LEVELS IN ITEMS RELATING TO PHYSICAL FITNESS, MOTOR ABILITY, AND SOCIAL ADJUSTMENT. MAJOR CONCLUSIONS WERE THAT (1) THE SKILL-ORIENTED GROUPS AT BOTH SCHOOLS INDICATED SIGNIFICANT IMPROVEMENT IN A GREATER NUMBER OF TEST ITEMS THAN DID THE OTHERS, (2) THESE SAME TWO GROUPS INDICATED A MORE UNIFORM IMPROVEMENT IN MOTOR ABILITY ITEMS, (3) THE SKILL-ORIENTED GROUP AT ONE SCHOOL INDICATED SIGNIFICANTLY BETTER PERFORMANCES THAN THE OTHER GROUPS AT THAT SCHOOL IN THE PULL-UPS AND VOLLEYBALL WALL VOLLEY, AND (4) BOTH THE SKILL-ORIENTED AND FREE-PLAY GROUPS AT THIS SCHOOL WERE SIGNIFICANTLY BETTER THAN THE PLAY-ORIENTED GROUP IN THE BASKETBALL WALL PASS. A MAJOR RECOMMENDATION WAS THAT A SKILL-ORIENTED PHYSICAL EDUCATION PROGRAM, SIMILAR TO THE ONE DEVELOPED IN THIS STUDY, BE UTILIZED FOR EDUCABLE MENTALLY RETARDED BOYS.

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6-8034

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CHAPTER I:

THE RESEARCH PROJECT

A. Statement of the Problem

The particular aim of education, per se, is to provide for optimum physical, social, emotional and intellectual growth and development of students based on their needs and interests. When considering the educable mentally retarded student, there is much evidence to indicate that learning ability is generally impaired and that unusual difficulty may occur when such learning is applied to normal standards. Although physical education is usually included within the curricula afforded the educable mentally retarded student, little has been done, through research, to ascertain whether or not specific class content, methods and procedures would be inherent in such programs.

Therefore, this study did undertake three special types of physical education programs, for educable mentally retarded boys, to determine which type, if any, could be most advantageous.

B. Related Literature

Although definitions are numerous, it is basically agreed that the educable mentally retarded student will possess an intelligence quotient of from fifty to seventy-five; will measure below average age performance in academic achievement and motor performance; will be able to learn on a limited basis; will achieve at least minimal occupational adequacy; and be potentially able to become a worthwhile member of society.

Due to the incomplete backgrounds on the part of so many of these students, performance levels on an individual basis become significant. It is also contended that the educable mentally retarded students need particular help in the areas of social adjustment, self-discipline, good health habits and success-type experiences. These, in addition to educational provisions based on need, interests, abilities and desirability, point toward the need for special education.

When being concerned about the three areas of achievement pertinent in this study, it is found, first of all, that the bulk of the research has occured in the area of motor ability. These studies have centered on a comparison of educable mentally retarded students with those of so-called normal ability. Despite the belief that there are marked individual differences in the ability to learn gross bodily motor skills it has been ascertained that normal children are superior to the educable mentally retarded on a variety of these skills. A number of other studies have given impetus to the theory that motor skills and intelligence have a very definite relationship. These more recent studies tend to disprove much of what had been believed by leading authorities prior to 1955.

In physical fitness, "normal" students, again, have generally been superior to educable mentally retarded students of like chronological ages; however, much less research is available in this particular area.

The area of social adjustment, it has been determined, constitutes one of the major goals in the modern education of the educable mentally retarded student. It is further contended that such adjustment is contingent on many other factors, the acquisition of motor ability and physical fitness not withstanding.

When considering implications for specific program development and/or justification, several definite recommendations appear to be outstanding.

A structured program of physical education for the educable mentally retarded student, it is believed, can contribute to greater appreciation and participation in activities that are relative to such a program. However, upon determining these activities, it is quickly pointed out that there is a definite lack of any factual type evidence to support the choice of same and that such selection has been almost entirely based on those activities taught to the so-called normal student.

Quite practically, it is determined that class size for the educable mentally retarded students, when taught as a specific group, should not generally exceed eighteen. When viewing methods and procedures, per se, good planning, self-direction, careful selection, familiarity, gradual progression, variety, simplicity, success, praise, encouragement, visual aids, patience, motivating factors, repetition, evaluation, participation, guidance and others are given avid support. The theories of reinforcement, as they relate to learning, and the presentation of semi-concrete materials as opposed to those of an abstract nature appear to be all-important when dealing with this type of youngster.

In concluding this portion, the literature clearly favors physical education for the educable mentally retarded student, presents much concerning their deficiencies when compared to normal students, and offers numerous suggestions for program planning. On the other hand almost nothing has been done concerning the educable mentally retarded students as they might react and/or compare when exposed to experimentation in physical education without the normal students being involved.

C. Objectives

1. To develop three types of physical education programs:
    a. The play-oriented physical education program
    b. The skill-oriented physical education program
    c. The free-play activity physical education program

2. To utilize reliable evaluative instruments in determining achievement levels of 110* educable mentally retarded boys between the chronological ages of ten and fifteen in
    a. Physical fitness
    b. Motor ability
    c. Social adjustment

3. To present the three types of physical education programs, via instruction for a period of fifteen school weeks involving three experimental groups at each school.

4. To determine achievement levels in physical fitness, motor ability, and social adjustment of the three experimental groups at each school following participation in the physical education programs.

5. To compare the respective achievement levels of the three experimental groups at each school.

6. To determine the following null-hypotheses:
    a. The experimental groups participating in the play-oriented physical education program will not show significant gains concerning achievement levels.
    b. The experimental groups participating in the skill-oriented physical education program will not show significant gains concerning achievement levels.

*This number includes the boys utilized in both the Pilot Study and the Major Study.

c. The experimental groups participating in the free-play activity physical education program will not show significant gains concerning achievement levels.
d. The play-oriented groups will not differ significantly from the skill-oriented groups in terms of achievement levels.
e. The play-oriented groups will not differ significantly from the free-play activity group in terms of achievement levels.
f. The skill-oriented groups will not differ significantly from the free-play activity groups in terms of achievement levels.

D. Population

1. Numbers and Sources:
The population of 110 educable mentally retarded boys between the chronological ages of ten and fifteen were made available by four institutional schools in Massachusetts and Rhode Island.

School	Location		Number
Dr. Joseph H. Ladd School	Exeter, Rhode Island	(Pilot Study)	16
Paul A. Dever State School	Taunton, Mass.	(Pilot Study)	12
Walter E. Fernald State School	Waverly, Mass.	(Major Study)	52
Wrentham State School	Wrentham, Mass.	(Major Study)	30

In procuring the population it was clearly understood that the "educable" boys would be determined as such by school officials based on that school's underlying criterion. It was also agreed that any boy presented for the study would under ordinary circumstances participate in the regular physical education program offered by the respective school.

2. Groups:
The educable mentally retarded boys presented by school officials with the exception of those boys at the Ladd and Dever Schools, were placed in one of three experimental groups via the "random table of numbers" technique. In doing so for the fifty-two boys at the Fernald School they were initially listed alphabetically by number. The first number selected was placed into Group A, the second into Group B, and the third into Group C. The fourth number selected then was placed into Group A and the selection continued until the three groups had been formed. The same procedure was followed for the thirty boys at the Wrentham School.
At the Fernald School there were three groups numbering eighteen, seventeen and seventeen and at the Wrentham School there were three groups of ten.
In the pilot study it was not possible, due to scheduling difficulties and/or numbers to utilize the "random table" technique of selection. Rather, the twelve available boys at the Dever School, between the chronological ages of ten and fifteen were designated as the Play-Oriented Group while the sixteen boys at the Ladd School were divided as randomly as their schedules permitted into the Skill-Oriented and Free Play Programs.

Although it was originally stated that the groups involved in the major study would be randomly assigned to a specific type of program this was not possible in the true sense of the word because:

a. Scheduling within the two schools was not flexible. That is to say that groups at Fernald and Wrentham once they were selected had to be scheduled by school officials at a definite time.

b. The restricted scheduling during each of the three days (Monday, Wednesday and Friday) had to then be adjusted to the availability of the Research Assistants, the number of available teaching stations, the distance involved between the two schools and finally feasibility in terms of transportation via automobile.

E. Development and Evaluation of Programs

First draft copies of the three types of physical education programs were developed prior to September 10, 1965. The material for these programs was ultimately selected and arranged on the basis of related literature and as a result of numerous observations. The rationale concerning each type of program is briefly explained in the following paragraphs.

1. The Skill-Oriented Physical Education Program was developed primarily with the emphasis on progressive skill development through constant drill and practice. The class organization was to be formal and time allotments for roll-call and personal inspection, warm-up activities, the instructional class and culminating activities were established. The proposed content consisted of progressive basic skills which were related to fundamental motor development, skills and skill sequences leading up to participation in modified games of soccer and volleyball and progressive individual stunts, tumbling and apparatus activities.

2. The Play-Oriented Physical Education Program was developed with the emphasis on organized play-type activities. The class organization was to be semi-formal and play-type activity was prevalent. Skills inherent in the activities were to be explained and demonstrated by the instructor but not practiced by the student. Time limitations for roll call and personal inspection, warm-up activities and the participation phase were established. The proposed content consisted of low organizational games and activities, related lead-up and/or modified games of soccer and volleyball, and organized play-type activities involving individual stunts, tumbling and apparatus.

3. In the Free Play Activity Physical Education Program activities were to be selected by the boys themselves. These were to be group activities or if the situation demanded they could be activities involving only the student. Skills inherent in these activities were not to be explained, demonstrated or practiced. Time allotments for roll-call and personal inspection, warm-up activities and selected activities were established.

4. Jury Technique - The programs described above were submitted to a jury of seven experts each of whom was actively involved in the area of physical education and/or mental retardation. These persons were requested to critically judge the respective programs and to suggest any changes, additions or deletions that they deemed necessary. Revision was to be considered upon the recommendation of two or more jurors or upon the recommendation of one juror and one or more members of the Doctoral Committee.
The changes, additions and deletions that were subsequently adopted appear in Chapters III, IV, V and VI along with the respective programs. The members of the Jury and the Doctoral Committee are listed under the Personnel Section.

F. Research Assistants

Three Research Assistants were selected to actively teach the three types of physical education programs. These men at the time of their selection were actively engaged in seeking an Ed.M. Degree at Boston University. In each case, their field of specialization was in the area of physical education. In the study they were referred to as "instructors." This did differ from "regular instructor" a label given to the men regularly employed by the schools involved.

These men were trained so that they were able to teach one of the three programs. They spent numerous hours in active study and/or discussion with the Principal Investigator and made several trips to the Fernald and Wrentham Schools to observe the students in a regular physical education class setting. They observed various phases of the Pilot Study and actively assisted the Principal Investigator in testing and/or teaching procedures. Each Research Assistant did teach at least one class hour during the course of the Pilot Study.

G. Pilot Study

A pilot study was held which involved twenty-eight boys from the schools at Exeter (Ladd) and Taunton (Dever) respectively. The study involved testing, pre and post, and experimentation with many aspects of the various type of physical education programs. It served as a primary training session for the research assistants to become more familiar with the educable mentally retarded boy, the testing procedures and with the type of program which they would be teaching.

The Principal Investigator taught each of the pilot study classes except when they were taught by the research assistant. Twelve class hours were spent with each of the three groups. That schedule appears below:

Date:	School:	School:
1/4/66	Ladd: Distribution of uniforms and experimentation with warm-up activities, class organization, and basic types of formations.	
1/5/66	Dever: (Same as Ladd Above)	
1/6/66	Ladd: Administration of Latchaw Test, aided by two research assistants and one graduate student.*	
1/7/66	Ladd: Administration of the AAHPER Battery assisted by one research assistant.	Dever: Administration of the Latchaw Test aided by one research assistant.
1/11/66	Ladd: Presentation of SO Classes I and II; beginning of Free Play Activity	
1/12/66	Ladd: Presentation of SO Class III; second class hour for free-play activity	Dever: Presentation of PO Classes I and II.

Date:	School:	School:
1/14/66	Ladd: Presentation of SO Class IV; third class hour for free-play activity.	Dever: Administration of AAHPER Battery aided by one graduate assistant.*
1/19/66	Ladd: Presentation of initial class hour in soccer; fourth class hour for free-play activity.	Dever: Administration of PO Class III, observed by one research assistant.
1/20/66	Ladd: Experimentation with tumbling activities with SO Group; continuation of free-play which also included tumbling activities; one research assistant observed and worked specifically with social adjustment rating techniques.	Dever: Presentation of PO Class IV. The class was taught by a research assistant.
1/21/66	Ladd: Experimentation with volleyball skill drills; continuation of free-play activity which was administered by a research assistant.	Dever: Experimentation with play-oriented activities involving the balance beams, rope skipping, dodge running, and throwing the softball.
1/24/66	Dever: Experimentation with play-type activities relative to volleyball. Observed by one research assistant.	
1/25/66	Ladd: Experimentation in tumbling and apparatus with both the SO and FP groups. One research assistant observed while the other aided in teaching.	Dever: Experimentation with play-type activities relative to volleyball and soccer. One research assistant observed while the other aided in teaching.
1/26/66	Dever: Experimentation in play-type activities relative to tumbling and apparatus.	
1/27/66	Ladd: Administration of the Latchaw Test assisted by one research assistant.	Dever: Administration of the AAHPER Battery assisted by a research assistant and a graduate student.*
1/28/66	Ladd: Administration of the AAHPER Battery assisted by three research assistants.	Dever: Administration of the Latchaw Test assisted by three research assistants.

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* Because it was not always possible for one or more of the research assistants to accompany the Principal Investigator, other graduate students in physical education were asked to assist when necessary.

H. Final Revision of Physical Education Programs

Following the completion of the pilot study final revisions were made, where necessary, in the various programs. Aiding the Principal Investigator in this endeavor where members of the Doctoral Committee. These revisions along with those made by the jury and/or determined via the Pilot Study are found in "program changes" which appear where applicable in the following four chapters.

I. Personnel

1. Principal Investigator
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4. Research Assistants

a. Richard Garey: B.S., 1965, Boston University; Ed.M., 1966, Boston University. Mr. Garey presently is employed by the State of New York.

b. William McKeown: B.S., 1965, Northeastern University. Mr. McKeown is presently employed by tha Malden, Massachusetts School Department.

c. William Willoughby: B.S., 1957, Morehead State University (Kentucky); Ed.M., 1966, Boston University. Mr. Willoughby is presently employed by the Quincy, Massachusetts School Department.

J. Testing

1. Physical Fitness: This is defined as the "gross physical capacity for activity." The AAHPER Youth Fitness Battery[1] was utilized as the instrument of measurement and included the following items.

a. Sit-ups
b. Pull-ups
c. Shuttle-run*
d. Standing Broad Jump**
e. 25 Yard Dash***
f. 600 Yard Run-Walk
g. Softball Throw For Distance

2. Motor Ability: This is defined as the "present and acquired ability to perform skills of a general or fundamental nature exclusive of highly specialized sports or gymnastic techniques." The instrument utilized was the Latchaw Motor Achievement Test.[2]

a. Basketball Wall Volley
b. Volleyball Wall Volley
c. Soccer Wall Volley
d. Repeated Softball Throws
e. Shuttle Run
f. Vertical Jump
g. Standing Broad Jump

Each boy was tested prior to his participating in one of the three types of physical education programs so that achievement levels in the above items could be ascertained.

3. Social Adjustment: This is defined as "the ability to get along with others and to exhibit desirable standards of conduct within a physical education class setting." The evaluative instrument utilized was the Lowell Social Adjustment Index[3] consisting of two forms, each of which contained ten specific items.

Positive Behavior Trends Form A	Negative Behavior Trends Form B
a. Enters heartily and with enjoyment into the spirit of social intercourse.	a. Somewhat prudish, awkward, easily embarrassed in his social contacts.
b. Frank, talkative and sociable, does not stand on ceremony.	b. Secretive, seclusive, not inclined to talk unless spoken to.
c. Self-confident and self-reliant, tends to take success for granted, strong initiative, prefers to lead.	c. Lacking in self-confidence and initiative, a follower.
d. Quick and decisive in movement, pronounced or excessive energy output.	d. Slow in movement, deliberative or perhaps indecisive. Energy output moderate or deficient.
e. Prefers group activities, work or play, not easily satisfied with individual projects.	e. Prefers to work and play alone, tends to avoid group activities.
f. Adaptable to new situations, makes adjustments readily, welcomes change.	f. Shrinks from making new adjustments, prefers the habitual to the stress of reorganization required by the new.
g. Is self-composed, seldom shows signs of embarrassment.	g. Is self-conscious, easily embarrassed, timid or bashful.
h. Tends to elation of spirits, seldom gloomy or moody.	h. Tends to depression, frequently gloomy or moody.
i. Seeks a broad range of friendships, not selective or exclusive in games and the like.	i. Shows preference for a narrow range of intimate friends and tends to exclude others from his association.
j. Hearty and cordial, even to strangers, forms acquaintanceships very easily.	j. Reserved and distant except to intimate friends, does not form acquaintanceships readily.
TOTALS	TOTALS

[1] American Association for Health, Physical Education and Recreation, Youth Fitness Test Manual, National Education Association, Washington, 6, D.C.

[2] Latchaw, Marjorie, "Measuring Selected Motor Skills in Fourth, Fifth and Sixth Grades," Research Quarterly, 25:439-49, December, 1954.

[3] Cowell, Charles C. "Validating an Index of Social Adjustment For High School Use," Research Quarterly, 29:7-18, March, 1958.

The boys were evaluated on the basis of this instrument following the seventh class hour by the regular instructor of physical education and the principal investigator.

* The shuttle-run test items appearing in the first two instruments were administered differently.

** The standing broad jump which appeared as an item in both instruments was administered in the same manner and thus was given only once in this study.

*** The AAHPER Test Battery called for a Fifty Yard Dash; however, adequate space was not available and the Twenty-five Yard Dash was administered instead.

K. Presentation of Physical Education Programs

The instructional period inclusive of time necessary for pre and post testing involved fifteen school weeks. Specifically each type of program was taught for a total of thirty-nine class hours (13 weeks). The classes which were structured for one clock hour were taught on a Monday, Wednesday and Friday by the research assistants. A complete explanation of the three types of programs is contained within Chapters III, IV, V and VI of this report. The schedule which was followed appears below.

1. Daily Time Schedule

8:00-9:00 A.M. at the Fernald School	Play-Oriented Group Free-Play Group
9:00-10:00 A.M. at the Wrentham School	Skill-Oriented Group
10:30-11:30 A.M. at the Wrentham School	Play-Oriented Group Free-Play Group
1:15-2:15 P.M. at the Fernald School	Skill-Oriented Group

2. Schedule of Classes

January: 31*

February: 2** 4**

7** 9 11

14 16 18

28***

March: 2 4

7 9 11

14 16 18

21 23 25

28 30

* Class I for each of the three programs

** Pre-testing

*** Social adjustment forms were completed following the seventh class hour.

April: 1

4 6 7

11 13 15 (Fernald Only)

18 20 22 (Wrentham Only)

25 27 29

May: 2 4 6

9 11 13

16 18 20**** **** Completion of instructional program

21 23 25 26 27 (completion of post-testing)

L. Post-Testing

Each student was tested at the conclusion of the instructional programs to determine achievement levels in the same items which have been previously presented. A complete report of the results appear in Chapter VII.

M. Treatment of the Data

1. The groups at the two respective schools were not combined but were treated as separate entities.

2. The performance on each item was recorded in terms of the raw performance and/or score as was true in the social adjustment index. The analysis of variance statistical technique was then employed to determine whether or not there were significant differences, at the 5% level of confidence, concerning the performance of each of the six groups following completion of the post-testing period.

3. The analysis of co-variance statistical technique was then utilized to determine whether there were any significant differences, at the 5% level of confidence, concerning the specific types of groups and/or physical education programs at the two respective schools.

4. The statistical outcomes are stated clearly in Chapter VII.

CHAPTER II

PILOT STUDY

The Pilot Study was conducted from 3, January through 28, January, 1966. The schools involved were the Doctor Joseph H. Ladd School in Exeter, Rhode Island and the Paul A. Dever State School in Taunton, Massachusetts.

At the Ladd School there were sixteen boys (16) involved whose ages ranged from ten years and two months (10-2) to fourteen years and eleven months (14-11). These boys were placed into two groups via a limited random selection method with one being designated as the Skill-Oriented group and the other as the Free-Play group.

At the Dever School there were twelve (12) boys ranging in age from ten years and eight months (10-8) to thirteen years and ten months (13-10). These boys were designated as the Play-Oriented group.

The twenty-eight (28) boys were all of the educable mentally retarded boys that were available whose birthdates occured between October 1, 1950 and May 1, 1956. Three boys, other than the sixteen which were utilized at the Ladd School were dropped because of severe physical and/or emotional handicaps. Two additional boys were dropped from the group at the Dever School because of misunderstandings regarding their qualifications. Both of these schools lacked an organized program of physical education at the time of the pilot study.

Each of the three groups met separately with the Principal Investigator for a total of twelve class hours (60 minute periods inclusive of shower and dressing procedures) which were scheduled over a four week period. Each of the three groups was administered a pre and post test in the American Association for Health Physical Education and Recreation (AAHPER) Youth Fitness Battery and the Latchaw Motor Achievement Test. Administration of these two instruments on a pre and post basis involved four of the available twelve class hours and left eight class hours for the purpose of program experimentation.

Minor alterations were made concerning some of the test items as a result of the pilot study. Much valuable training and experience was gained by the three Research Assistants who were trained for the most part during this same period of time. Specific changes which were made in testings procedures are stated below.

1. AAHPER Battery:

   a. Sit-ups: Both elbows will contact both knees simultaneously.
   b. Shuttle-run: The tester is to give constant verbal assistance in terms of what to do as confusion does exist.
   c. 600 Run-Walk: Because of distinct differences in ability laps must be carefully counted for each boy.

2. Latchaw Motor Achievement Test:

    a. Time limits for practice trials were increased to fifteen seconds rather than the ten seconds originally alloted.
    b. Vertical Jump: The student was not asked to jump up and "grab" but rather to merely make contact with the highest possible strip. Many strips were pulled down until this innovation was enforced.
    c. Shuttle Run: See AAHPER Shuttle Run above.

3. Cowell Social Adjustment Index:

    a. The words, "social intercourse" were omitted in item number one under positive behavior trends. The words "the activity" were put in their place.
    b. The words "in his social contacts" were omitted in item number one under negative behavior trends and "while participating in activity" was substituted in their place.

Complete daily lesson plans and parts of others along with definite techniques, formations and warm-up activities were experimented with concerning the Skill-Oriented and Play-Oriented groups. In doing so each of the three major divisions of both programs was included. As a result, several changes were made but not before they were accepted by the Doctoral Committee. Such changes are specifically noted along with "program changes" found in Chapters Three through Six.

The Free-Play group was allowed, for the most part, to function just as the program outline specified. Both the "majority rule" and the "individual student" concept were utilized with the former being far more effective. Certain activities and/or techniques were induced, particularly in tumbling, so that problems could be ascertained relative to the major study.

In each of the three programs enthusiasm was evident and each group was obviously benefitting from their respective experience. Specific highlights of the Pilot Study included findings relative to:

a. Equipment
b. Success
c. Competition
d. Oral counting procedures
e. Frustration
f. Fear
g. Unsupervised free play
h. Grasping of techniques
i. Disciplinary measures
j. Interest span
k. Motivation
l. Personal dressing habits
m. Health habits
n. Warm-up activities
o. Anger
p. Attention span
q. Intentional breach of discipline

It was of great interest to observe that even following such a short instructional span the large majority of the twenty-eight educable mentally retarded boys did improve and/or remain the same regarding the tests in Physical Fitness and Motor Ability. The greatest improvements were noticed in running events (shuttles and the dash) and the standing broad jump. It was of interest to note that in both of the shuttle-runs and the standing broad jump that the concept was difficult for these boys to grasp during the initial attempts. In both the pre and post testing the standing broad jump was administered twice and in most cases the boy performed better during the second trial.

The absentee-rate and reasons for same were carefully noted. Illness led the list of causes which also included "absent without leave", "detained", "not returning promptly from a home visit", and "transportation difficulties". Cases involving "illness of long-standing" did not occur despite repeated warnings from school officials that such could be expected.

As a result of the Pilot Study the Principal Investigator was able to make numerous revisions in the physical education programs which were in addition to those already incorporated as a result of the jury's earlier suggestions. Too, the Research Assistants had been exposed considerably to the educable mentally retarded child and were able to complete their training in preparation for the major study.

CHAPTER III

PROGRAMS

A. Introduction:

The three types of physical education programs were developed so that it could be ascertained which type, if any, might be better suited for the educable mentally retarded boy between the chronological age of ten and fifteen (10-15).

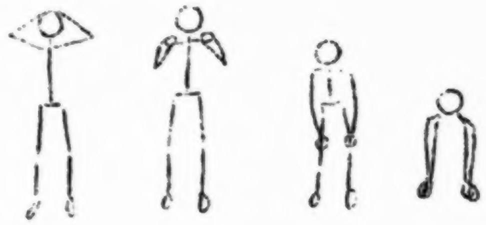
Each program which is fully described in the chapters that follow (4, 5, and 6) was based on a specific premise. These were; skill learning via practice and drill with little play involved; playing organized games or activities which were based on certain skills; and offering a free choice of activity. Despite the differences in type there were aspects common to each program. One of these was the technique utilized in taking roll and in conducting a brief personal inspection as it was believed that such is important regardless of type and should not in any way be left to the factors of chance. Too, the warm-up activities were the same for each of the three programs as it was believed that at least a brief warm-up involving particularly the large muscles of the body was advantageous and should not be ignored. The emphasis on leading these activities was, however, different as the instructor led each time for the Skill-Oriented Program while students were allowed to assist the instructor in the other two types of programs. beginning with the ninth class hour.

It was following completion of the warm-up activities that the programs differed markedly. This becomes very evident as each program is presented in subsequent chapters.

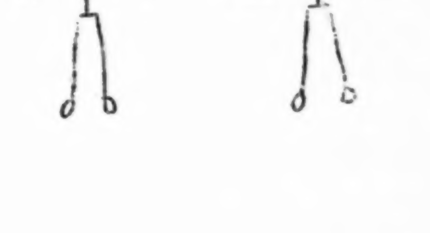
B. Phases Pertinent to All Programs:

1. Warm-up Activities: The following warm-up activities were originally included, or were added as a result of suggested changes by the Jury, or due to findings of the Pilot Study. It should be noted that each warm-up activity appears in sequence. With the exception of those utilized at the outset, the sequences consisted of four and/or five consecutive class hours. Therefore, each activity appeared two or three times during the course of the study on a revolving basis.

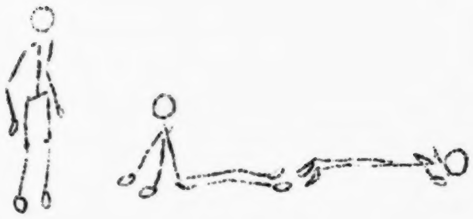
   a. Head, shoulders, knees and toes: The boy follows verbal directions which begin with touching the head, then the shoulders, the knees and finally the toes. If the group is able the progression can be done in reverse order.



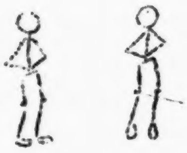
   b. Arm Circles: These too are dependent on verbal directions from the instructor. Usually the circles go from very small and progress to very large. It is best to continue this activity without allowing them to stop.



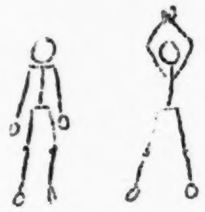
c. Scramble: The boys are told to go to a definite position and remain there until a command is given to change. As a result of a Jury recommendation it was determined that a boy should not go from a standing to a flat-back postion. The usual commands are; "feet", "seat", "knees", "back", "tummy" and"side".



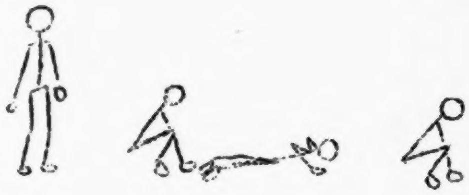
*d. Raise Up On Toes: The boy simply raises up on his toes at the count of one and drops down on the count of two. Verbal direction of "up"and "down" can also be used. The hands are on the hips.



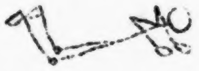
e. Side Straddle Hop: The boy stands erect with his hands at his sides. At the count of one he claps his hands straight above his head and his feet spread apart. At the count of two he returns to the original position. The "clap-slap" technique with no verbal count can also be utilized.



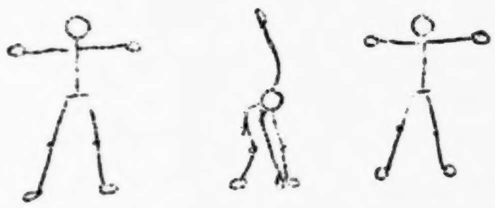
f. Squat Thrust: This is a four-count movement. On "one" the hands go directly to the floor; on "two" the legs shoot back so that the body is in a high push-up position. On "three" the legs come back under the body and on"four" the boy comes back to a standing postion with hands on his hips.



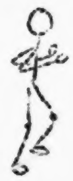
**g. Modified Push-up: The boy pushes up from the knees and not the toes. The hands should be directly under the shoulders and the count is "1-2". "Down-Up" can also be used.



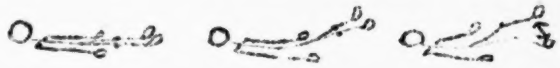
h. Windmill: The boy stretches his arms out straight,at right angles to the body,and parallel with the floor. At the count of "one" he touches the left foot with the right hand while the other arm goes into the air like the two were tied on a pole. On a count of "two" the arms come back and on "three and four" they go to the opposite side.



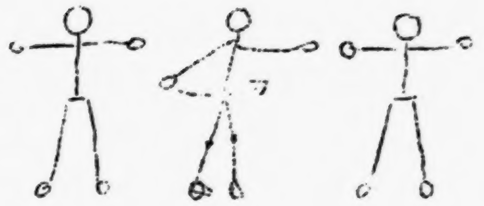
i. Running in Place: The boy runs in place with the emphasis being to stay "on the toes" and to keep the knees high. The instructor should alter the pace.



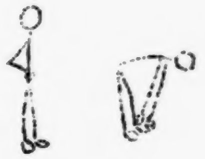
j. Lift-em-and-Spread-em: The boy raises his legs away from the floor approximately twelve inches and then spreads the legs apart. He then moves them back together and drops them back to the floor. The command should be a verbal "lift-em, spread-em, back together, and down". The hands should be on the floor beside the body unless the innovation of patting the "tummy" lightly is utilized.



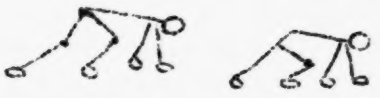
k. Wing-Flapper: Like the Windmill, the arms are raised and parallel to the floor. On the count of "one" both arms swing sharply to the left but remain fixed at the shoulder joint. At the count of "two" they come back to a neutral position and on "three" and"four" they are swung to the opposite side.



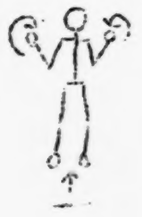
*** l. Touch Toes: The boy begins from a position of hands on hips. On the initial count he touches his toes without bending the knees and on "two" he returns to the original position.



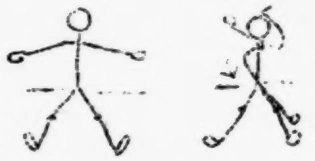
*** m. Chu-Chu Train: This is identical to the treadmill movement which is an alternating movement of the legs. No count should be attempted and mimetics in relationship to a train should be encouraged.



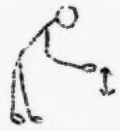
n. Rope Jumping Mimetics: The boys pretend that they have ropes and can actually be directed verbally to attempt almost anything such as a double-jump,a triple-jump and the like. The pace should be altered by the instructor.



o. Windmill Sitting: The principle is the same as for the regular Windmill activity except that the boy is in a sitting position with the legs spread far apart. He bends forward at the waist in attempting to touch the left toe with the right hand. A "1-4" count is recommended.

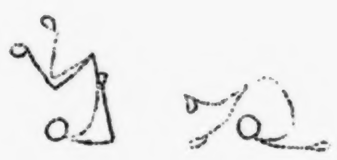


****p. Dribble-Pivot_Mimetics: The instructor simply says "let's dribble" and begins to do so in an imitating fashion. The boys follow his lead. The same procedure is followed concerning the "pivot".

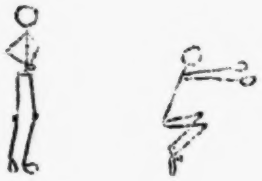


*****q. Throwing and Catching Mimetics:

r. Bicycle and Kickover: The boy from a back-lying position puts his feet into the air and supports his body with the hands under the hips and the elbows on the floor. The legs then move in a peddling fashion. The command is then given to "kick the floor behind you". In doing so the arms should go to a flat postion on the floor. Verbal direction is necessary.

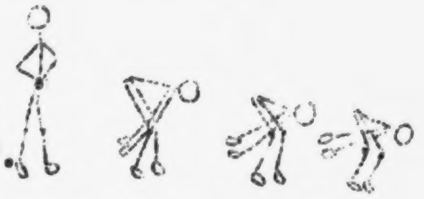


s. Kneebends: The boy stands erect with hands on hips. On the initial count he bends his knees and puts his arms out in front of his body. On the count of "two" he returns to the original position. The thighs should be parallel with the floor when the knees are bent and the weight should be centered on the balls of the feet.



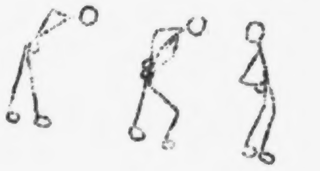
*****t. Squat Jumps:

******u. Straight-Leg-Stretchers: The boy spreads his legs wide with the hands on the hips. On the count of "one" he pushes his hands down between the legs and attempts to touch an imaginary or real line behind him. He continues this pushing motion on the two subsequent counts and returns to the starting postion on the count of "four".

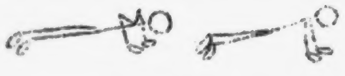


v. Sit-ups (arms outstretched): The boy, on the count of "one" or on the command of "up" will touch his toes with his hands. He returns to a back-lying position on a count of "two" or command of "down".

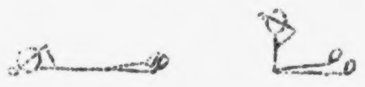
*******w. Trunk-Twister: The boy with his hands on his hips and with the upper body slightly bent forward, twists or rolls the body to the left on the count of "one", throws the upper body straight back on the count of "two", twists to the right on the count of "three" and returns to the original position on the final count.



********x. Push-up: From a front-lying postion and with the hands directly under the shoulders the boy raises up to an erect body position where only the hands and the toes are contacting the floor. On the count of "two" or command of "down" he returns toward the floor but contacts it only with the chest.



********y. Sit-up: This is the conventional sit-up with the hands folded back of the neck. The boy raises to a sitting postion and contacts both knees with the elbows before returning to a back-lying postion . Another boy may hold the ankles. The count can be "1-2" or the command can be "up-down".



*This warm-up activity was eliminated after being utilized for the initial sequence. For the most part, the boys were not sufficiently challenged.

**Because of Jury reaction this modified version was inserted only for the initial sequence.

***These activities were added as a result of experimentation during the Pilot Study.

****Because this was a specialized activity appropriate to the program during the first division (SO and PO) it was eliminated following the first sequence.

*****These activities were eliminated because of Jury response, comments from the Doctoral Committee and as a result of experimentation during the Pilot Study

******This activity was altered during the second sequence because of much confustion concerning the"how". A second boy was placed behind and the boy in front tried to grab his hands.

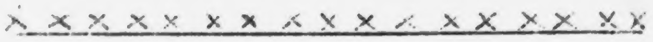
*******This activity was eliminated following the initial sequence. Too much confusion arose and difficulty resulted as to "how" they could logically follow the pattern which was demanded.

********These activities replaced modified versions utilized during the initial sequence.

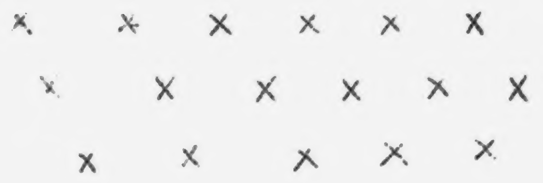
2. Formations:

The formations utilized in the physical education programs are specified in each daily class plan where it is feasible to do so (see chapter 4, 5 and 6). These same formations are briefly described and sketched below so that the reader can become familar with them prior to examining the individual class plans.

a. Line: Boys stand side by side with an arms length interval between each one.

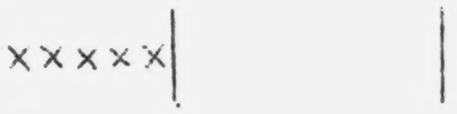


b. Open: This consists of two or more lines which generally face the same direction. This is used following a count-off by the boys. The command is "Open-Ranks", "March." This command was utilized in the Skill-Oriented Program until alterations were made (See Chap. 4).

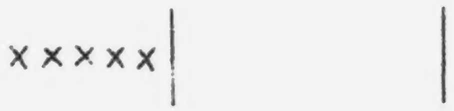


c. Groups: These occur any time the boys are divided into anything other than a typical line formation such as is utilized during roll-call and personal inspection.

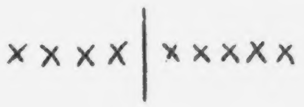
d. Squad or Relay: The term "squad is used in the Skill-Oriented Program, while "relay" is primarily utilized in the Play-Oriented Program. Both indicate a division into two or more groups.



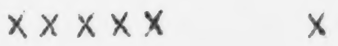
e. Single-File: This occurs when the boys in a squad, relay, shuttle, modified shuttle or relay-target formation are standing one behind the other and not side by side.



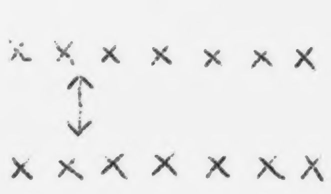
f. Shuttle or Divided Squad: This occurs when a predetermined group is divided and the two segments face one another on the opposite side of a line or net.



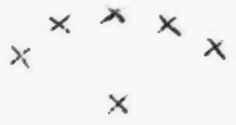
g. Modified Shuttle or Relay-Target: This finds one boy facing a single-file line (squad or relay).



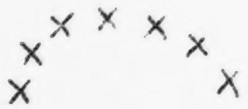
h. Parallel Lines or Parallel Lines, Opposite Sides: Two lines face each other with a given distance separating them.



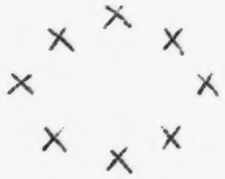
i. Pepper: One boy commonly referred to as the "leader" or "point man" faces from three to six others. Rotation concerning this formation usually occurs from left to right.



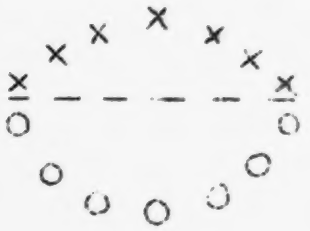
j. Semi-Circle: As the name implies this formation appears to be approximately one-half of a regular circle formation.



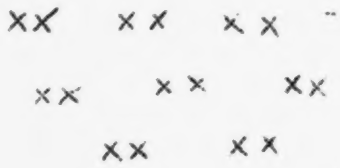
k. Circle: This represents a complete circle formation.



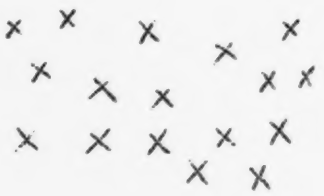
l. Divided Circle: This is utilized when one half of the circle is in direct opposition to the other for purposes of competition. Each team thus forms a semi-circle.



m. Couples or Small Groups: This is when two boys as in the case of the "couple" or three or more boys as in the case of "small groups" are formed. Small groups could also consist of "couples".



n. Random or Dispersed: This is when the boys are contained with a given area but are not placed into a specific formation.



o. Team: As the term indicates, the boys are in a definite team formation (i.e. volleyball)

p. Stations: This is when the boys have been divided into groups or squads and move from one place to another on the floor in order to perform specific-type activities.

3. Evaluation Forms:

a. Daily: So that evaluation regarding the individual students and/or specific phases of the programs could be as complete as possible, a daily evaluation form was utilized. This form which also served as an accurate record of attendance is reproduced on the following page (p. 21.).

b. Special: To facilitate evaluation in terms of the techniques utilized during the final day of each division (class 13 of each division for SO and PO and classes 14, 26 and 39 in FP) a specail form was used. This is reproduced on page 22.

DAILY EVALUATION FORM

Type:____Division:____Class No.____Hour:____School:_____Date:____Absent:____

"1" Indicates a slightly inferior or below average performance
"2" Indicates an average performance
"3" Indicates a slightly superior performance (Circle Appropriate Number)

Name:	Roll	Warm-up	Performance-Achievement	Social Adjustment	Comments
1.			1 2 3 1 2 3		
2.			1 2 3 1 2 3		
3.			1 2 3 1 2 3		
4.			1 2 3 1 2 3		
5.			1 2 3 1 2 3		
6.			1 2 3 1 2 3		
7.			1 2 3 1 2 3		
8.			1 2 3 1 2 3		
9.			1 2 3 1 2 3		
10.			1 2 3 1 2 3		
11.			1 2 3 1 2 3		
12.			1 2 3 1 2 3		
13.			1 2 3 1 2 3		
14.			1 2 3 1 2 3		
15.			1 2 3 1 2 3		
16.			1 2 3 1 2 3		
17.			1 2 3 1 2 3		
18.			1 2 3 1 2 3		

COMMENTS!

SPECIAL EVALUATION FORM

Type:____ Division:____ Class No.____ Hour:____ School:_____ Date:_____ Absent:____

Place a short line through the number which most accurately indicates the performance level of the student. At the conclusion of the class hour the lines should be connected so that achievement can be noted in a clear and concise manner.

"1" Indicates a slightly inferior performance
"2" Indicates an average performance
"3" Indicates slightly superior performance

Name:										
1.____	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
2.____	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
3.____	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
4.____	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
5.____	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
6.____	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
7.____	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
8.____	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
9.____	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
10.____	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
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12.____	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
13.____	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
14.____	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
15.____	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
16.____	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
17.____	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
18.____	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3

COMMENTS!

CHAPTER IV

SKILL ORIENTED PHSICAL EDUCATION PROGRAM

A. Introduction:

This program was presented on the premise that more could be gained by the educable mentally retarded boy if the major emphasis was placed on basic and progressive skill development, per se. Such development,it was thought, would more thoroughly prepare the boy in terms of the recognized objectives of physical education as well as to provide him with a more effective means of personally adapting to activities relative to fundamental motor development and attributes of social adjustment within a physical education class setting.

B. Aim:

The aim was to assist each boy in the realization of optimum development through activities which emphasized the learning of skills and enableed him to gain greater appreciation concerning the physical, social and emotional aspects of such activity.

C. Objectives:

The objectives of this program were as follows:

1. To establish an adequate rapport between teacher and students.
2. To establish basic guidelines that are to be followed while in the locker room, the gymnasium and/or outdoor playing area.
3. To define and demonstrate organizational procedures.
4. To teach specific skills with an awareness that:
    a. Abilities and attention spans among the students may differ greatly.
    b. Instruction must be progressive.
    c. A formal classroom atmosphere should prevail.
    d. Familiar materials and/or formations may be beneficial.
    e. Concrete proposals rather than abstract ones will probably be grasped more quickly.
    f. Variety in technique is advisable.
    g. Students must be considered separately and afforded individual attention.
    h. Demonstration, direction and illustration are essential.
    i. Problems of difficulty will be handled diplomatically and without threat.
    j. Praise rather than reproof appears to be advisable.
    k. Constant motivation is advantageous to the student.
    l. Repetition of skills appears to be necessary for retention.
5. To encourage participation.
6. To recognize success.

D. Structure:

1. Each individual class hour was formal in terms of organization and teaching techniques.
2. The specific skills included during any given class hour were carefully explained and demonstrated. The students were then subject to organized practice and/or drill-type activities to facilitate proper learning of and retention of these skills.

3. Activities other than skill learning situations, per se, were presented as culminating and/or evaluative measures.
4. The following limitations were observed in terms of time allotment during the organizational and instructional portions of each class hour (clock hour).

    a. Roll-call and personal inspection----------------2--4 minutes
    b. Warm-up Activities---------------------------------4--6 minutes
    c. Instructional Class--------------------------------28-32 minutes
        (1) Learning of Skills-------(22-28 min.)
        (2) Culminating Activity-----(4--6 min.)
    d. Dressing and Showering ----------------------------18-22 minutes

5. The class content, progressively planned on a daily basis, was presented in three divisions which were:

    a. Progressive basic-movement skills relative to fundamental motor development.
    b. Progressive skills and skill sequences leading up to participation in modified games of soccer and volleyball.
    c. Progressive skills involving individual stunts and elementary tumbling and apparatus.

E. Class Organization: Aside from the emphasis placed on continual skill learning and practice much importance was attached to a formal-type class situation. To facilitate this the study originally called for the following:

Supplement: Class Organization**

Step I: Arrange students in line formation and assign permanent roll-call numbers from one through eighteen.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
x x x x x x x x x x x x x x x x x x

Step II: Instruct the students how to count off in consecutive order for purposes of roll call. In doing so have them turn their head and look at the the boy next to them.

StepIII: Instruct the students how to step out in open order at the command of "forward march". The instructor will designate which students (via number) are to step out and the number of steps that each group will take in doing so.

x x x x x x
x x x x x x
x x x x x x

Step IV: Following the warm-up activity instruct students to close ranks. The command will be "Left Face, Forward March".

x x x x x x
x x x x x x
x x x x x x

Step V: Instruct students how to conduct themselves during the explanation-demonstration portion of the class hour which will immediately follow the warm-up activities.
    a. From the closed ranks postion the students will sit down with everyone facing the same direction.
    b. The legs should be drawn up and the arms around the knees.

Adopted From:
**Arthur G. Miller and Virginia Whitcomb, Physical Education in the Elementary School Curriculum. Englewood Cliffs: Prentice Hall, Inc., 1963, pp. 31-32.

Following the initial three weeks of instruction it became necessary to alter the foregoing"supplement" in the following manner and for the reasons stated.

1. "Forward March" (Step III) was dispensed with in favor of "March". The connotations of the former simply gave impetus to many minor disciplinary problems.
2. There was much difficulty experienced at both schools in getting the boys to count and/or remember their respective numbers. Despite this, the method was retained throughout.
3. It was discovered that two lines (Step III) were far more practical than three, particularly when it was also determined that the boys paid better attention when they were allowed to sit down in two parallel lines (Step IV and V) and face the instructor for purposes of explanation and demonstration.
4. Concerning Step V, therefore, the "closed ranks" position and the stipulation that the legs be drawn up with the arms around the knees were both dispensed with.

F. Division I: Progressive Basic Movement Skills:

1. Introduction: The initial class hour was taught at both schools on January 31, 1966, prior to administration of the pre-tests involving physical fitness and motor ability which were administered on February 2, 4 and 7. This thirteen class hour division was completed with an evaluation (obstacle course) on March 14, 1966.
2. Program Changes, Additions or Deletions: The material below enumerates the specific, changes, additions and deletions which were made following correspondence with the Jury, the completion of the Pilot Study and final conferences with the Doctoral Committee. These changes were, of course, made concerning the original plans and are "built-in" to the plans found in this report.

Skill-Oriented Program
Division I:
Program Changes

Key To Changes: Suggested By: J = Jury, C = Doctoral Committee, P = Pilot Study

Class I:
Omitted walking around a circle and included instead "walking backward" as a skill to be demonstrated and practiced.
Added "walking forward on a balance beam" as a skill to be demonstrated and practiced. (J--P)

Class II:
Added "walking forward on an inclined balance beam" to be demonstrated and practiced. (P)

Class III:
Added "walking on a raised balance beam" as a skill to be demonstrated and practiced. (J--P)

Class IV:
"Running backward" and "running around or through obstacles" were reversed in order of presentation. This was done so that running was stressed as a skill prior to experience with obstacle running. (P)
Added practice drills for balance beam work which had now been included. (C)
Low speed in running backwards was emphasized both from standpoint of demonstration by the instructor and participation by the students. (J)
The obstacle run should be demonstrated at half speed by the instructor. (J)

Class V:
Final review work in beam walking was included in drill presentation. (C)

Class VI:
The obstacle run drill was included as a part of the practice session dealing with specific skills. (P--C)

Class VII:
The running broad jump was omitted. More emphasis was placed on the standing broad jump and the ability to leap over obstacles. (J--P)
Individual jump rope work was postponed to allow for more practice on jumping and leaping skills and to forestall confusion relative to other rope skills. (C--J)

Class VIII:
Two-thirds of the available time was to be devoted to individual rope jumping. (C--J)

Class IX:
In the dribbling drill, the boys will dribble to pre-determined line and then return by dribbling, rather than passing the ball back. (J--P)
The culminating activity was changed from "Minute Drop" which did not appear to be practical to "Pepper Squat". (P--C)

Class X:
Basic passing drills including the bounce pass were continued. (C--P)

Class XI:
No changes.

Class XII:
No changes.

Class XIII:
Arrows are to be placed on the floor area to indicate direction in various portions of "obstacle course." (J--P)
The option of either the one-foot or two-foot hop was eliminated with the former being retained. It was determined that too much confusion would likely arise with such a choice.
The "standing broad jump" was inserted in place of the"running broad jump. (J--C)

3. Outline of Daily Class Plans:

Day:	Objectives:	Specific Skills:	Culminating Activity:
1.	a.)To introduce formal class organizational procedures. b.) To present fundamental skills relative to basic motor development.	Walking forward, backward and on low balance beam Balance	Tight Rope Relay
2.	a.) To continue emphasis on formal organizational procedures. b.) To enlarge the scope of activity relating to basic movement skills.	Walking forward, backward and on low and inclined beam Balance	Tight Rope Relay
3.	a.) To reinforce techniques relative to organizational procedures. b.) To slightly increase the complexity of basic movement skills.	Balance Walking on inclined and raised beam Running	Reverse and Run Relay
4.	To continue presentation of basic movement skills which are slightly more difficult.	Walking on beam Running forward and backward Dodging while running	Balance and Turn Relay
5.	To introduce techniques which generally represent more advanced fundamental skill development.	Running and Dodging Hopping one foot two foot	Dodge-Hop Relay
6.	To further develop more advanced fundamental movement skills.	Standing Brd.Ju. Hopping variations Leaping	Follow The Leader
7.	To introduce variations of a multiple-movement type skill.	Jumping over moving object and moving rope	Crossing The Brook
8.	To continue class participation with specific emphasis on multiple movement type skills.	Jumping over moving object with ind. ropes	Last Man Out
9.	To introduce skills involving the use of a large circumference ball.	Passing with one and two hands Dribbling	Pepper Squat
10.	To emphasize further, selected fundamentals involving simple ball skills.	Passing-enrichment Bounce pass Dribbling Pivoting	Dribble-Volley-Pass-Relay
11.	To introduce simple skills involving the use of a small circumference ball.	Throwing underhand overhand Catching	Minute Drop
12.	To emphasize further, selected skills related to simple ball activity.	Throwing variations Catching flyballs and ground balls	Pepper Squat
13.	a.) To determine to what extent the students will achieve in a selected battery of skills. b.) To determine the reaction of the students to a challenging but somewhat complex situation.	Beam walking Running-dodging Leaping Throwing and retrieving Dribbling and passing Standing Brd. Ju. One-foot-hop	Obstacle Course

4. Presentation of Daily Class Plans:

Each class plan is presented on the pages that follow. Comments relative to their effectiveness and recommendations for further changes or revision are included.

Skill-Oriented Program
Division I: Class I:

Class Organization and Specific Formations:	Time Allotment:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Instructional Class	28-32 min.
Skills: a. (squad), b. (squad), c. (squad)	(22-28 min.)
Culminating activity (relay)	(4--6 min.)
4. Equipment and supplies	
a. 3, 12' balance beams	

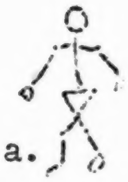
Warm-up Activity: (Instructor Leads)

1. Head, shoulders, knees and toes (verbal - no count)
2. Arm circles (verbal - no count)
3. Scramble (seat, feet, stomach, back, knees, feet) (do not go from feet to back!)

Instructional Class:

1. **Objectives:**
   a. To introduce formal class organizational procedures
   b. To present fundamental skills relative to basic motor development

2. **Explanation-Demonstration:**
   a. Walking forward
   b. Walking backwards
   c. Walking forward on low balance beam.

a.


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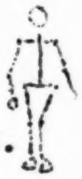
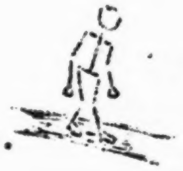


c.


3. **Participation-Practice of Skills:**
   a. Walking: Form three squads which run parallel to one another. The first boy in each group walks normally toward the other side of the gymnasium under the watchful eye of the instructor. This is repeated for each boy and individual instruction should be given where necessary to aid in correcting obvious faults.

   b. Backward Walking: Utilizing the same lines, practice the backward walk. Begin with one boy at a time in each line and then progress to the entire group moving simultaneously. (1/3 available time)

   c. Beam Walking: Utilizing these same groups, the boys practice walking forward on low balance beams. No more than two boys should be on a beam at the same time. (1/3 available time)

4. **Culminating Activity:**
   Tight Rope Relay: The groups form three relay columns. Each player walks heel and toe the length of the line and back, tags the hand of the next player, and goes to the end of the line. If a player should step off the line, he must stop momentarily and then continue.

Teaching Techniques:

It is essential that the class organizational procedures be carefully rehearsed with the boys during the initial three class hours so that a definite routine can be established.

In walking, the toes should be straight ahead and there should be a free swing of the legs from the hips. The arm swing should be minimal and basically result from normal body movement. Abnormal arm swing, foot placement or leg movement should be corrected. The heel should contact the surface initially, then the toe (ball of the foot). The walk should be relaxed with the body fairly erect and the feet far enough apart for adequate support and/or comfort. A boy who leans forward when walking, has his feet too far apart or walks stiffly should be given individual assistance in correcting these deficiencies.

When walking on the beam, care must be taken to place one foot in front of the other with the primary weight on the front foot. The arms should be used to help gain and maintain balance. Student spotters can be employed if boys are experiencing difficulty. When walking backward the center of gravity is not shifted in the direction of movement as it is in walking forward. Instead a foot is lifted and placed securely a short distance back before the weight is shifted.

Obviously some of the boys will have little or no difficulty; however, it is hoped that those who do can be helped as this is basic to the other skills that will follow. The boys should be kept within the prescribed drill patterns and individual assistance should be given wherever possible. The culminating activity, while it does modify enjoyment, stresses proper walking techniques.

Comments: (after conducting the research class)

1) The boys were intrigued both by the "head, shoulders, knees and toes", and the "scramble" warm-up activities. They experienced only minor difficulty with the concept involved in the "arm circles".

2) In terms of organizational procedures it became quite obvious that this type of student would have more than just a "problem" when it came to counting and/or remembering numbers.

3) The majority of the boys did attempt to walk properly although disciplinary problems can occur easily unless the instructor is able to keep most of them busy at the same time.

4) Many of the boys were relatively unsure of themselves in the backward walking. Much individual attention was necessary and it was difficult to keep some of the more advanced boys from running backward.

5) The beam work was gratifying in that both groups were very eager to succeed. Because the beam was flat on the floor spotting for safety was not necessary but spotting for the sake of reassurance was beneficial.

6) The "Tight Rope Relay" provided much excitement and achieved its purpose as a culminating activity.

Skill-Oriented Program
Division I: Class II:

Class Organization and Specific Formations:	Time Allotment:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Instructional Class	28-32 min.
Skills: a. (squad), b. (squad), c. (squad)	(22-28 min.)
Culminating activity (relay)	(4--6 min.)

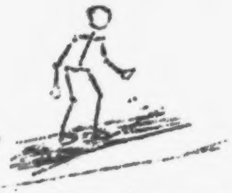
4. Equipment and supplies
    a. 3, 12' balance beams
    b. 3 firmly constructed stools approximately 8" in height

Warm-up Activity: (Instructor Leads)
1. Raise up on toes ("up-----down")
2. Side-straddle-hop (1-2 count)
3. Squat thrust (1-4 count)
4. Modified push-ups (5, from knees, "up--down")

Instructional Class:
1. Objectives:
    a. To continue emphasis on formal organizational procedures
    b. To enlarge the scope of activity relating to basic movement skills

2. Explanation-Demonstration:
    a. Walking backward
    b. Walking forward on an inclined balance beam

b.



3. Participation-Practice of Skills:
    a. Walking: The drill from the previous class hour concerning the forward and backward work is repeated here with more emphasis being placed on better performances. (1/3 available time)

    b. Beam Walking: Each group lines up facing a balance beam. The first boy in each group gets on the beam and attempts to walk. No more than two boys should be on a beam at one time. (1/3 available time)

    c. Raised Beam Walking: One end of the beam is then raised at least 8" from the floor (low stool). The same drill is then continued. (1/3 available time)

4. Culminating Activity:
    Tight Rope Relay: The groups, as they did during the previous class hour, form three relay columns. Each player walks heel and toe the length of the line and back, tags the hand of the next player, and goes to the end of the line. If a player should step off the line, he must stop momentarily and then continue.

Teaching Techniques:

Again it is very important that organizational procedures be carefully rehearsed. It is equally significant to exhibit a firm attitude relating to the acquisition of these procedures.

A Review of both forward and backward walking is thought to be important in that serious individual mistakes can be corrected where necessary.

The performances on the low beam should be somewhat improved following the initial session and success should be recognized to encourage participation. Certainly some reassurance may be necessary upon shifting to the inclined beam. Boys who encounter relatively little difficulty here can be utilized as "spotters" for those who are skeptical or simply not capable without some individual assistance from the instructor.

Comments: (after conducting the research class)

1) Much difficulty was experienced with the "squat thrust" and the "modified push-up". Basically it appeared to be a problem of not understanding how they were to be executed although the upper arm strength factor and the aspect of hard work also seemed to enter in. The "side-straddle-hop" was well accepted but the problems involving coordination with these boys becomes rather evident. "Raising up on the toes" did not seem to sufficiently challenge them but no real difficulty was apparent

2) The walking drill was not sufficiently challenging to those boys who experienced little or no difficulty. A discipline problem is, therefore, potentially possible in such a dituation and the instructor should keep the boys moving at a relatively fast tempo.

3) The low beam walking was again well received and the individual successes were more in evidence. It was not as difficult to keep the boys interested during this drill.

4) The inclined beam proved to be more difficult for many but despite this the participation was favorable. More spotting was necessary and it became evident here that the more skillful boys could be well utilized in aiding those who were having difficulty.

5) The "Tight Rope Relay" in its second day was quite successful as a culminating activity. There was generally more attention paid to detail.

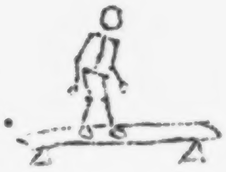
Skill-Oriented Program
Division I: Class III:

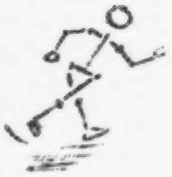
Class Organization and Specific Formations:	Time Allotment:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Instructional Class	28-32 min.
Skills: a. (squad), b. (line), c. (line)	(22-28 min.)
Culminating activity (relay)	(4-6 min.)
4. Equipment and supplies	
a. 3, 12' balance beams	
b. 6 firmly constructed stools approximately 8" in height	

Warm-up Activity: (Instructor Leads)
1. Side-straddle-hop
2. Windmill (1-4 count)
3. Squat thrust
4. Modified push-ups (from 6 to 8)

Instructional Class:
1. Objectives:
   a. To reinforce techniques relative to organizational procedures
   b. To slightly increase the complexity of basic movement skills

2. Explanation-Demonstration:
   a. Walking on a raised balance beam
   b. Running in place
   c. Running techniques

a. 

c. 

3. Participation-Practice of Skills:
   a. Beam Walking: Utilizing three squads the initial drill constitutes a review of the low and inclined beam walking which were described previously. The beam is then raised on both ends. The drill continues. (1/2 available time)

   b. Running: The three groups, maintaining their identity, return to a line formation. The boys run in place at the direction of the instructor. (1/4 available time)

   c. Running: From this same formation the boys, by groups, and at the direction of the instructor run to the opposite side of the gymnasium. When each of the three groups has completed the run to the opposite side the drill is continued. (1/4 available time)

4. Culminating Activity:
   Reverse and Run Relay: Form three relay groups. The first boy on each team walks backward to the turn-line (20 feet away), and then runs back to tag the next boy in line. The relay continues.

Teaching Techniques:

The elevated beam will require someone to spot for each group and it is suggested that each boy have the opportunity to do this during the course of the practice session. It is quite important here that the arms be used to good advantage for balancing purposes and that little or no emphasis be placed on speed.

The general mechanics of running should be carefully shown and clearly explained. Remember too that demonstration is very significant with these youngsters and probably will speak much louder than words. In running, the initial contact is made with the ball of the foot and the heel may or may not be lowered to the ground as the body passes over the foot. Whether the heel does make contact depends a great deal on the gait. The angle of the body is somewhat forward and the arm swing from the shoulder should be coordinated with leg movement. Excessive swinging of the arms and/or running with the head down should be corrected if at all possible. As was true in walking, some of the students probably will experience little difficulty but again it is important that obvious mistakes be treated accordingly.

Comments: (after conducting the research class)

1) The "squat thrusts" were generally greatly improved while the "modified push-up" continued to be difficult. Also, it did not appear that that type of student could be expected to follow the actions involved in the "windmill". It is recommended that the instructor turn his back to the group momentarily so that they can properly observe what is expected of them.

2) Walking on a raised beam was a successful activity. The majority of the boys strived to master what for some of them was a very difficult maneuver. For the most part, the boys who had been classed by school officials as lower in educability definitely had more difficulty with the raised beam both from the standpoint of willingness to participate and possessing enough skill to maintain their balance.

3) Despite the instruction rendered numerous styles of running were evident and individual attention was necessary. The drills both were successful, although if one can move the entire group at once this is recommended. Such a procedure would eliminate "waiting around" and help to dispel potential disciplinary problems.

4) The culminating activity was quite successful.

Skill-Oriented Program
Division I: Class IV:

Class Organization and Specific Formations:	Time Allotment:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Instructional Class	28-32 min.
Skills: a. (squad), b. (line), c. (squad)	(22-28 min.)
Culminating activity (relay)	(4-6 min.)

4. Equipment and supplies
   - a. 3, 12' balance beams
   - b. 6, 8" stools
   - c. 12 traffic cones (sub folding chairs if necessary)

Warm-up Activity: (Instructor Leads)
1. Windmill
2. Squat thrust
3. Modified push-ups (from 7 to 9)
4. Running in place (vary the pace)

Instructional Class:

1. Objective:
   To continue presentation of basic movement skills which are slightly more difficult.

2. Explanation-Demonstration:
   - a. Running backward
   - b. Running around obstacles

3. Participation-Practice of Skills:
   - a. Beam Walking: Walking on the raised balance beam is reviewed via the same procedures utilized in previous plans. (1/3 available time)

   - b. Running: Form a single line. By groups, the boys run slowly backward to the opposite side of the gymnasium. When the last of three groups have completed this initial try the drill continues with the instructor varying the rate of speed. (1/3 available time)

   - c. Obstacle Running: Each group has a four-cone "obstacle course" on which to practice. Boys take consecutive turns at running through the cones. Emphasis should be on the ability to dodge the cones and to maintain a steady pace. (1/3 available time)

4. Culminating Activity:
   Balance and Turn Relay: Form three relay groups. Each will face a balance beam. The initial boy, upon walking the beam, turns around and walks backward to the turn-line and then runs back to tag the next student in line. The relay continues.

Teaching Techniques:

In running backwards, much care must be taken not to emphasize speed, per se. It should be carefully demonstrated at a low speed that the weight is almost entirely on the balls of the feet. One might even show how it is very easy to fall backwards to the floor if the weight is shifted to the heels. Too, the importance of the arms for balance and/or protection should be pointed out.

It is known that the boys will have difficulty in adjusting to obstacle running. Though little can be emphasized, with these boys, concerning shifting of the weight, probably the most significant advice is for them to run their route carefully and to utilize their arms in helping to gain the required shifting movements. It is important to demonstrate this initially at half speed so that skill is being emphasized.

Balance beam work is still included and the important thing is that those who need additional moral support receive same.

Comments: (after conducting the research class)

1) Individual performances in the "squat thrust" continued to show improvement. The same did not hold true regarding the "modified push-up". Upper arm strength obviously is a continuing factor. The "windmill" and "running in place" activities were both quite successful from the stand point of class participation.

2) There was evidence of definite individual progress in walking on the raised balance beam. Balancing skills, like those included in this study, are highly recommended for the educable mentally retarded boy.

3) Although the drill was not unsuccessful it is difficult to control the speed of a boy when he is practicing the backward run. There was a greater tendency for these boys to look back as they ran and for this reason the prompt recognition of success by the instructor via a verbal retort is recommended so that the boy can become more sure of his actions.

4) Little attempt was made by a majority of the boys to cut "close corners" in the obstacle run. They were far more concerned with getting through without bumping a cone. Arrows (masking tape) are recommended if a particular direction is deemed desirable. The obstacle drill provided a basis for self-motivation and very little urging was necessary.

5) The only confusion resulting with the culminating activity was that of having the boy turn around and walk backwards from the far end of the balance beam to the turn-line. It is recommended that he run to the wall and then walk backward upon returning to his relay line.

Skill-Oriented Program
Division I: Class V:

Class Organization and Specific Formations:	Time Allotment:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Instructional class	28-32 min.
Skills: a. (squad), b. (line), c. (line)	(22-28 min.)
Culminating activity (relay)	(4-6 min.)
4. Equipment and supplies	
a. 12 traffic cones (folding chairs can be used)	

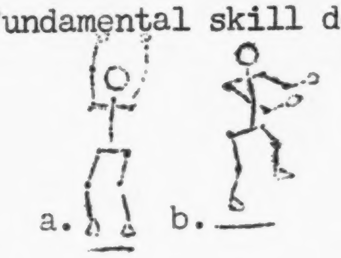
Warm-up Activity: (Instructor Leads)

1. Windmill
2. Lift em and spread em (verbal)
3. Modified push-ups (from 8 to 10)
4. Running in place

Instructional Class:

1. Objective:
   To introduce techniques which represent more advanced fundamental skill development.

2. Explanation-Demonstration:
   a. Hopping forward with both feet simultaneously
   b. Hopping forward with one foot only



3. Participation-Practice of Skills:
   a. Obstacle-Run: The obstacle-run drill is continued from the previous class hour. (1/3 available time)

   b. Two Foot Hop: The class is brought back to a line formation. The interval between students is somewhat increased and together they hop (two foot hop) forward to the other side. They return in the same manner. Following two such trials a whistle drill is employed as follows: When whistle sounds each boy begins hopping forward and when it sounds again he stops. He begins again with the next whistle, etc... Whether this drill and the next one will involve the entire class or only one group and/or one student at a time will have to be determined at the time of the actual instruction. The whole-class method is preferred when the whistle drill is being employed. (1/3 available time)

   c. One Foot Hop: The same procedure is utilized for the one-foot-hop. (1/3 available time)

4. Culminating Activity:
   Dodge-Hop Relay: Form three relay groups. The boys run through the obstacle course (4 cones) to the turnline and hop back using the two-foot hop. The relay continues.

Teaching Techniques:

In demonstrating the two-foot hop, the toes should point straight ahead and the knees should bend straight forward over the toes. The entire body should lean forward from the feet in order for the center of gravity to be moved forward. It should be remembered too that in demonstrating, the depth of the crouch will directly affect the distance covered and that underdeveloped leg muscles are significant in this regard. In reality this is the standing broad jump and can be taught in a like manner.

In the one-foot-hop the "lame leg" should be drawn up under the body and not merely lifted or moved over to one side. Balance is more critical here and some spotting may be necessary.

Success here should be rewarding and individual assistance is urged where possible

Comments: (after conducting the research class)

1) "Running in place" became very popular with the boys and they particularly enjoyed changing the pace without actually stopping to do so. Concerning the "lift em and spread em" activity the tendency was not unlike that found among normal boys. More specifically this problem was concerned with raising the legs too high and thus greatly diminishing the effectiveness of the activity.

2) Obstacle running skill drills are definitely recommended for this type of student. They require much developmental work in dodging fundamentals.

3) The two-foot-hop practice drill as described above is definitely recommended as the learning situation afforded by it was a good one. A minority of the boys did experience considerable difficulty in grasping the coordinate movements which are required in the modified standing broad jump.

4) The one-leg-hop as it might be expected was not as difficult for them but the means used to satisfy the ends were quite varied. Emphasis, therefore, must be placed squarely on how properly to execute the skill.

5) The culminating activity must be classed as successful for this type of student. There is good opportunity here for the boy to utilize those skills practiced earlier.

Skill-Oriented Program
Division I: Class VI:

Class Organization and Specific Formations:	Time Allotment:
1. Roll call and personal inspection(line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Instructional class	28-32 min.
Skills: a. (squad), b. (squad). (22-28 min.)	
Culminating activity (broken line)(4-6 min.)	

4. Equipment and supplies
   a. 12 traffic cones
   b. 12 wooden boxes, 4, 6, 8 and 10" x 10" x 10" (3 of each size)

Warm-up Activity: (Instructor Leads)
1. Windmill
2. Lift em and spread em
3. Wing-flapper (1-4 count)
4. Running in place

Instructional Class:
1. Objective:
   To further develop more advanced fundamental movement skills

2. Explanation-Demonstration:
   a. Jumping (standing broad jump) over objects from a standing position
   b. Jumping over objects following a running start
   c. Leaping over objects following a running start

c.

3. Participation-Practice of Skills:
   a. Backward Run-Obstacle: Form three squads. Each faces a row of four traffic cones, approximately five feet apart. This is the same obstacle drill as previously used but utilizing the backward run. (1/4 available time)

   b. Jumping Over Objects: Utilizing the same three groups in squad formation, the first boy in each group jumps (big hop) from a standing start over a 4" x 10" x 10" wooden box. This is repeated over three more boxes and the height is increased by two inches in each case. The boy then goes to the rear of his line. No race or contest is intended and as many as two or three boys can go over the boxes in a particular line at the same time if the instructor feels this is practical.
      1) Utilizing the same formation the interval of the boxes is increased. The drill continues with the boys jumping over the boxes following a running start and using a two-foot-takeoff.
      2) With the interval of the boxes again increased the students leap over the boxes. (3/4 available time)

4. Culminating Activity:
   Follow The Leader: Each boy within a squad has the opportunity to lead his group utilizing any type of hopping, jumping or leaping.

Teaching Techniques:

When hopping or jumping over an object, a greater back swing with the arms should aid the boy considerably.

In jumping over an object from a running start, both feet should land somewhat together as in the hop. The feet should be fairly well spread and the arms should be used both for "balancing" and "pulling-up" purposes. Landing with "give" in the knees can be mentioned although it may not be comprehended.

When leaping and/or jumping from a running start there are other considerations. In leaping, the foot that leaves the floor first must land first. A stride-type landing is called for and some emphasis should be on the feet being slightly apart to help regain and/or maintain balance.

Comments: (after conducting the research class)

1) Little improvement was noted in uniformity regarding the "lift em and spread em" activity. The "wing flapper" like the "windmill" was confusing for them and again it is recommended that the instructor face away from the group momentarily while demonstrating the activity.

2) The other obstacle running in reverse direction was well received. Such a drill is recommended as long as speed is not emphasized.

3) Jumping, from a stationary position, from a running start, and leaping over the progressively higher boxes clearly marked the most spirited participation evidenced since the onset of this program. The challenge was obvious and the boys took great delight in meeting with both individual and group success. The sturdily constructed boxes (1" x 4" material covered with pegboard) are definitely thought to be practical in that the interval can easily be increased or decreased as the situation may demand.

4) The culminating activity did allow most of the boys an opportunity to lead. Leaping over the boxes was the choice selected most often by the various leaders of each group.

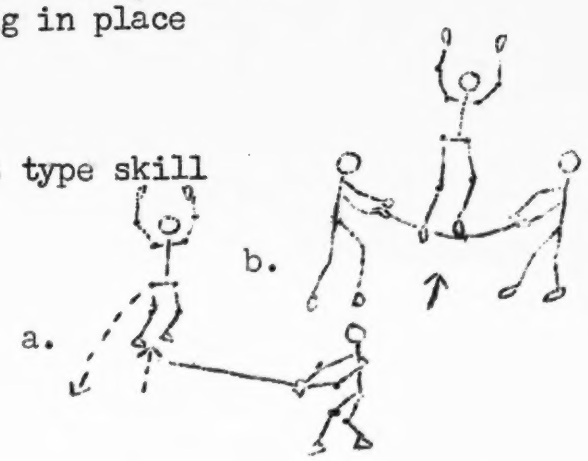
Skill-Oriented Program
Division I: Class VII:

Class Organization and Specific Formations:	Time Allotment:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Instructional class	28-32 min.
Skills: a. (squad), b. (circle), c. (semi-circle)	(22-28 min.)
Culminating activity (relay)	(4-6 min.)

4. Equipment and supplies
   - a. The same wooden boxes required earlier
   - b. 3, 14' ropes with old sneaker tied securely on one end(heavy clothesline)
   - c. 3, 16' ropes (heavy clothesline)

Warm-up Activity: (Instructor Leads)
1. Touch toes (1-2 count)
2. Wing flapper
3. Lift em and spread em
4. Running in place

Instructional Class:
1. Objective:
   To introduce variations of a multiple-movement type skill



2. Explanation-Demonstration:
   - a. Jumping over a moving object
   - b. Jumping over a moving rope

3. Participation-Practice of Skills:
   - a. Hop Jump and Leap: The skill drills presented during the previous class hour concerning hopping, jumping and leaping are held again utilizing the same procedures. (1/3 available time)

   - b. Jump The Shot: Each of the three groups form a circle. The boys in each circle take turns being in the middle and swinging the rope; however, no boy should swing it for more than 45 seconds at any one time. The boys in each circle face the same way so that they can see the rope coming. (1/3 available time)

   - c. Rope Jumping: Each group is then given a 14' rope and two selected boys are to swing it while the others will take turns arrempting to successfully jump over the rope. (1/3 available time)

4. Culminating Activity:
   Crossing The Brook: Form three relay groups. The first boy runs to the edge of the brook and leaps over (36"). If his foot gets "wet", he must hop back to his line utilizing either type of hop as a penalty. The competitive relay continues.

Teaching Techniques:

There would seem to be little doubt that some review of demonstration from the previous class hour concerning the big hop, the jump and the leap will be necessary. Certain mistakes can be pointed out without the students involved being aware that it is their problem which is being discussed.

The primary purpose in jumping over the "shot" is to provide each boy the ultimate realization of successfully jumping with an individual rope if at all possible. He must either hop or jump over the rope as it approaches the ankles and the correlation with the two-foot hop should be mentioned. The boy swinging the shot must keept it at floor level. Later when two boys from each group swing the big rope the carry-over from the foregoing technique should be emphasized.

It may be necessary for the instructor to swing the rope if problems do arise. If this does occur the groups can be redivided. There is considerable opportunity here for individual instruction.

Comments: (after conducting the research class)

1) The boys enjoyed the "toe touching" activity and certainly were not unlike the normal student in not attempting to keep their knees straight. Little improvement was noted in the "lift em and spread em" especially regarding directions as to how high the legs were to be lifted from the floor.

2) It is significant that the boys had looked forward to a continuation of the hopping, jumping and leaping over boxes. Such an innovation is definitely recommended for this type of student.

3) Little problem was encountered in persuading the boys to jump over the "shot" after they clearly understood what was expected of them. The explanation-demonstration in this instance and the one to follow is extremely important.

4) Although they did help as "swingers" several older boys definitely balked at even attempting to jump over the rope swung by two classmates. It appeared as though they feared being exposed. The other boys did attempt to be successfull and generally the activity was acceptable in terms of introducing them to the multiple skills involved. Discipline can be a problem when the skills tend to be difficult and it is recommended that the number of groups utilized be no greater than two.

5) The culminating activity was well accepted with most of the boys participating.**

**It must be pointed out here that in some instances a boy simply would not participate. If efforts to bring him into the activity failed he was instructed to sit on the bleachers until he changed his mind, which he often did, or until the instructor had the opportunity to talk with him and persuade him to return to action.

Skill-Oriented Program
Division I: Class VIII:

Class Organization and Specific Formations: — Time Allotment:

1. Roll call and personal inspection (line) — 2--4 min.
2. Warm-up activities (open) — 4--6 min.
3. Instructional class — 28-32 min.
    - Skills: a. (semi-circle), b. (circle) (22-28 min.)
    - Culminating activity (circle) (4-6 min.)
4. Equipment and supplies
    - a. 3, 16' ropes
    - b. 3, 14' ropes with sneaker securely tied on one end
    - c. 18-21 individual jumpropes of varying sizes (heavy clothesline)

Warm-up Activity: (Instructor Leads)

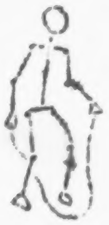
1. Touch toes
2. Wing flapper
3. Lift em and spread em
4. Chu-chu train (treadmill)

Instructional Class:

1. Objective:
   To continue class participation with specific emphasis on multiple-movement type skills.

2. Explanation-Demonstration:
    - a. Enrichment of previous skills
    - b. Jumping with individual ropes

b.



3. Participation-Practice of Skills:
    - a. Group Rope Jumping: Each of the three groups participate in the drill described during the previous class hour concerning the long rope with two boys doing the swinging. (If time permits the boys can be allowed to jump the "shot" in the same manner as the previous day.) (1/3 available time)
    - b. Individual Rope Jumping: Form one large circle with adequate space between each boy. Each will practice individual rope-jumping. (2/3 available time)

4. Culminating Activity:
   Last Man Out: Form three circles. This is a competitive activity whereby the boys in each group on a whistle signal begin to jump with the individual ropes. The group who has one or more boys jumping after the others have failed is declared the winner. Exceptionally good jumpers might well serve as "judges", following the initial contests.

Teaching Techniques:

In utilizing the individual jump ropes, the boys should be encouraged and mistakes should be de-emphasized. It will depend on the student as to which type of jump is recommended, and whatever is attempted the rope should be swung forward and must fit the student in terms of length.

Some may appear to be slightly confused as to why they cannot successfully jump with an individual rope. Much care should be taken to work with them and to assure them that it can be accomplished. For those who simply cannot seem to grasp the skill even partial success should be quickly recognized in the hope that such action may spur him on to a better performance.

Comments: (after conducting the research class)

1) The "chu-chu train" (treadmill) proved to be highly acceptable to the boys as a warm-up activity. Success was recognized easily and the mimetics involved seemed to help considerably. No count in this activity is recommended and the boy is allowed to develop his own rhythm.

2) The participation and the individual successes both were noticably improved in the group rope jumping drill. The older boys for the most part still balked at jumping but again served sufficiently as "swingers". This particular practice-type activity definitely is recommended for this type of student and the recognition of individual success is very important.

3) Individual rope jumping went very badly as an activity. Basically the problem was one of coordination and/or understanding what was to be accomplished. This is not to suggest that this type of student should not be taught how to jump with the individual rope, but at the same time it must be realized that success in most instances will not be easy. The time limitations involved with this study did not allow for further work in this area.

4) Because of the difficulty encountered with the individual rope jumping, the culminating activity was not at all successful and discipline problems did occur. This activity is not recommended until at least a majority of the boys are able to succeed even in a rudimentary manner.

Skill-Oriented Program
Division I: Class IX:

Class Organization and Specific Formations:	Time Allotment:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open formation)	4--6 min.
3. Instructional class	28-32 min.
Skills: a. (parallel lines), b. (parallel lines). c. (parallel lines with closed ranks)	(22-28 min.)
Culminating activity (pepper)	(4-6 min.)
4. Equipment and supplies a. 8 basketballs	

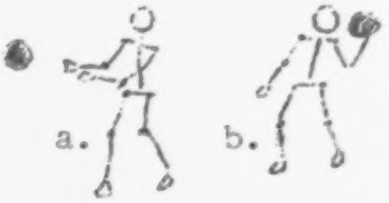
Warm-up Activity: (Instructor and Students (2) Lead)

1. Touch toes
2. Wing flapper
3. Rope-jumping mimetics (vary the pace)
4. Chu-chu train

Instructional Class:

1. Objective:
   To introduce skills involving the use of a large circumference ball

2. Explanation-Demonstration:
   a. Overhand pass (two hands) and catching of same
   b. Overhand pass (one hand) and catching of same
   c. Simple dribbling



3. Participation-Practice of Skills:
   Two parallel lines approximately eight feet apart are formed by having odd-numbered boys go forward from the line formation. The interval between boys should be about six feet. This serves as the basic pattern for the drills that follow. (Hopefully there will be a ball for every two boys.)

   a. Two Hand Chest Pass: The boys are told to begin the two-hand-chest pass. They should not be allowed to increase the distance as this is probably what some will attempt to do. (1/3 available time)

   b. Baseball Pass: The baseball pass is handled in the same manner; however, the lines are moved to a distance of approximately twelve to fourteen feet apart. (1/3 available time)

   c. Dribbling: For the simple dribbling drill the line away from the wall moves back to and directly in front of the other line of boys. The dribbling drill, following the demonstration, has the first boy dribbling to a predetermined line (12 feet away), turning, and then passing the ball back to the next boy in line. The drill continues. (1/3 available time)

4. Culminating Activity:
   Pepper Squat: Form three pepper formations. The leader of each group passes the ball to the boy on his left who returns the pass to the leader. If this transaction is successful on both counts the boy squats down and the leader goes on to the next one. The first group to have everyone squatting is the winner of that contest. It is recommended that only the two-hand-chest pass be used and that the interval between the leader and the other boys not be greater than ten feet.

Teaching Techniques:

Previous experience is very apt to be more prevalent involving these skills than any of the others that have been presented thus far. The primary purpose here is to introduce to the boys how to properly handle a ball of this size. The passes should be carefully demonstrated and to watch the ball, learning to propell it in a straight path and keeping it above the waist should be emphasized.

The dribble should be shown separatly from the other skills. Do not force the students to use only one hand if two is the only real way that they can successfully make it go. When they dribble to the turn-line, have them stop and turn around on one foot. Do not attempt to have them establish a pivot foot, per se, or they are very apt to become confused.

Comments: (after conducting the research class)

1) Rope jumping mimetics like "running in place", "head, shoulders, knees and toes", "scramble", and "chu-chu train" proved to be very popular with the boys. Again they appreciated the change in pace that this type of activity offers and it was not one where a definite count was necessary.

2) Both passing drills were successful and the very nature of the formation allowed the instructor to render effective individual instruction. Past experiences with basketball skills was somewhat evident; however the skills involved, specifically with passing have to be taught very carefully. Older boys who had balked at previous rope jumping activities participated quite readily in these drills.

3) Dribbling, although it was difficult for many, must be considered a very meaningful experience for this type of student. For the most part they worked diligently at the skill. The two hand technique and/or an exceedingly high bounce was evident with many but certainly these problems are surmountable.

4) The culminating activity was quite acceptable; however, because of possible disciplinary problems it is recommended that only two groups be used instead of three.

Skill-Oriented Program
Division I: Class X:

Class Organization and Specific Formations:	Time Allotment:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Instructional class	28-32 min.
Skills: a. (parallel lines), b. (pepper), c. (squad)	(22-28 min.)
Culminating activity (relay)	(4-6 min.)
4. Equipment and supplies	
a. 8 basketballs	

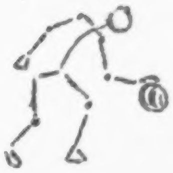
Warm-up Activity: (Instructor and Students (2) Lead)

1. Touch toe
2. Windmill, sitting (1-4 count)
3. Rope-jumping mimetics
4. Chu-chu train

Instructional Class:

1. Objective:
   To emphasize further, selected fundamentals involving simple ball skills.

2. Explanation-Demonstration:
   - a. Bounce pass
   - b. Dribble and simple reverse pivot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3. Participation-Practice of Skills:
   - a. Passing: With the incorporation of the bounce pass along with the two-hand chest and baseball pass, the drill introduced during the previous class hour is again utilized. (1/3 available time)

   - b. Passing: Form three pepper groups. The leader always passes to the others in order from left to right so that added problems do not occur. The instructor should designate which of the three types of passes are to be utilized and sound a whistle signal to change leaders. (1/3 available time)

   - c. Dribbling and Pivoting: Each of the groups form squads for a dribbling drill which also includes the reverse pivot. Each boy goes through his first turn in mimetic fashion (this may be more effective to continue several times). This is done on a stagger basis so that individual help can be given where necessary. Following the mimetics, the first boy in each line will be given a basketball and this drill continues for the duration of the alloted time. (1/3 available time)

4. Culminating Activity:
   Dribble-Volley-Pass Relay: Form three relay groups in each line. The first boy in each line dribbles (12 feet) to the line, passes and retrieves the ball three times off of the wall, turns and passes the ball back. The relay continues.

Teaching Techniques:

There probably will be definite faults that must be pointed out carefully to the boys (i.e. throwing the low and/or hard passes, catching the ball with no give, keeping the fingers too stiff and/or not watching the ball). They will bounce the ball anyway so this form of passing is being demonstrated and condoned.

In dribbling the emphasis should again be on success and not particularly on form. Despite this the proper skills are to be demonstrated and the advantages of using one hand should be mentioned.

The reverse pivot is to be shown. Point out quickly to the boys that it does not make any difference which foot they choose to use, but that to use just one and let the other swing around is important. Some of the boys are apt to find these particular skills rather interesting and such may spur them on to a better performance.

The culminating activity directly modifies the practice sessions, but offers an outlet for the boys and opportunity for individual performance to be recognized.

Comments: (after conducting the research class)

1) The "windmill sitting" warm-up activity did not confuse the boys nearly as much as had the regular windmill (standing). They were able to pay more attention to what they were supposed to be doing in the sitting position.

2) Utilizing the pepper drill formation as a means of learning to pass and catch is recommended, but the number of groups must be selected on the basis of anticipated discipline problems.

3) The simple drop-leg pivot did appear to frustrate a number of the boys. Despite this it is believed that the basic concept involved was grasped by the majority.

4) Because both groups had been exposed previously to basketball more than any other area they continually asked to play a game and/or shoot at the baskets. It was difficult for them to realize that the emphasis was on skill, per se.

5) The culminating activity progressed reasonably well as they enjoyed bouncing the ball off the wall and the competitive atmosphere.

6) In view of the constant requests to "play basketball" it is recommended that such an activity be considered as a possible culminating activity.

Skill-Oriented Program
Division I: Class XI:

Class Organization and Specific Formations:	Time Allotment:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Instructional class	28-32 min.
Skills: (parallel lines throughout)	(22-28 min.)
Culminating activity (pepper)	(4-6 min.)
4. Equipment and supplies	
a. 8 soft balls	
b. 4 soft-soft balls	

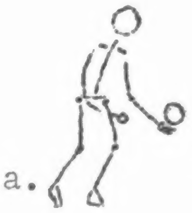
Warm-up Activity: (Instructor and Students Lead)

1. Dribble-pivot mimetics
2. Windmill, sitting
3. Rope-jumping mimetics
4. Chu-chu train

Instructional Class:

1. Objective:
   To introduce simple skills involving the use of a small circumference ball

2. Explanation-Demonstration:
   a. Rolling the ball
   b. Throwing the ball
      underhand
      overhand
   c. Catching the ball
      above the waist
      below the waist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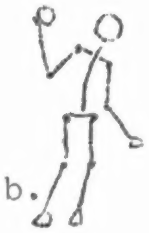
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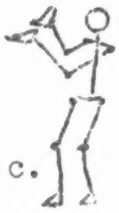
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3. Participation-Practice of Skills:
   Form two parallel lines, facing one another approximately fifteen feet apart. This is the formation for the drills to follow.
   a. Rolling and Catching: A boy throws the ball to the student directly across from him in an underhanded motion so the ball rolls on the floor. (One ball for every two boys.) The receiver picks up the rolling ball and the drill continues. (1/3 available time)

   b. Tossing and Catching: The activity is now altered to emphasize underhand throwing and catching. (1/3 available time)

   c. Throwing and Catching: The final drill involves overhand throwing. It is recommended that the lines be moved slightly further apart and that the interval between boys in the same line be checked for purposes of safety. (1/3 available time)

4. Culminating Activity:
   Minute Drop: Form three pepper groups. Each group passes continually for some forty-five seconds. The number of times the ball strikes the floor is recorded. At the end of the time the best group (least number of drops) is noted. The contest continues with a new boy as the leader.

Teaching Techniques:

Emphasize initially to the boys that throwing involves the body and not just the arm. Also remind them that the ball is held with the fingers and not the hand, although this may result in some confusion. Any type of follow-through is optional for this time and such would depend on the group as to whether or not it should be mentioned. The foregoing is best transmitted via sound demonstration geared to the level of students at hand.

In catching, carefully demonstrate what may occur when the hands and/or fingers are still or poorly placed. Despite the fact that it may prove quite difficult for some of the boys, the folding and movement of the hands must be shown.

Beginning with the rolling ball and working up to the overhand throw should tend to instill greater confidence in some of the boys. It is hoped that a regulation sized softball can be used; however, if necessary a larger (soft-soft) ball can be used for part of the drill or if necessary for the entire time alloted.

Comments: (after conducting the research class)

1) Not as much difficulty was encountered with the "dribble-pivot mimetic" as had been previously anticipated. Despite the fact that this was also true regarding the play-oriented program these boys did show more attention to detail than the others (play oriented and free-play). The performance in the "windmill sitting", very definitely improved while "rope jumping mimetics" and the "chu-chu train" remained very popular. When so-called "popular" warm-up activities are included only minimal urging is necessary with those boys who might otherwise refuse to participate.

2) The drills involving the throwing and catching of the softball were successful despite minor problems with throwing too hard and/or not following directions, the latter being a constantly reoccuring problem. There is no reason at all to believe that these particular skills are too difficult for the educable mentally retarded boy to learn.

3) "Minute Drop" was generally acceptable as a culminating activity. The problems involved were again attributed primarily to not understanding the activity. With a class size of eighteen and being confronted with various disciplinary problems it is recommended that the instructor select his groups as to personnel. Also two groups could be used instead of three.

Skill-Oriented Program
Division I: Class XII:

Class Organization and Specific Formations:		Time Allotment:
1. Roll call and personal inspection (line)		2--4 min.
2. Warm-up activities (open)		4--6 min.
3. Instructional class		28-32 min.
Skills: (circle throughout)	(22-28 min)	
Culminating activity (pepper)	(4-6 min.)	
4. Equipment and supplies		
a. 8 softballs		
b. 4 soft-soft balls		

Warm-up Activity: (Instructor and Students Lead)

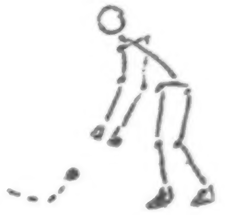
1. Dribble-pivot mimetics
2. Windmill, sitting
3. Bicycle and kickover (verbal)
4. Rope-jumping mimetics

Instructional Class:

1. Objective:
   To emphasize further, selected skills related to simple ball activity

2. Explanation-Demonstration:
   a. Fielding a ground ball
   b. Fielding a fly-ball

a.



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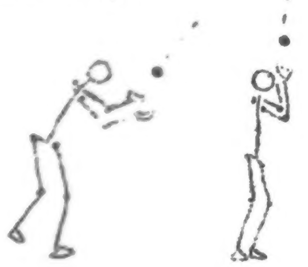


3. Participation-Practice of Skills:
   Each of three groups is assigned to a circle area and is to be involved in one of three specific drills. They rotate from circle to circle upon the signal of the instructor.

   a. Catching Fly-Balls: The group in the center circle is involved in "fly-ball catching" and the instructor should toss the ball if necessary. It is hoped, however, that each boy can achieve this himself, at least in a minimal manner. (1/3 available time)

   b. Fielding Ground Balls: The group occupying one outside circle is involved with fielding ground balls which should be rolled in the same manner as the previous day. If possible this should be done on a 1 to 1 ratio. (If balls are at a minimum the pepper formation may be used.) (1/3 available time)

   c. Throwing and Catching: The group in the other outside circle is involved with throwing and catching the ball utilizing acceptable form.

4. Culminating Activity:
   Pepper Squat: Form three pepper groups. Upon the signal to begin, the leader of each group throws the ball to the first boy on his left. If the throw is successfully caught and successfully returned that boy will squat down. The first group to have everyone down is declared the winner. The contests would then continue with new leaders.

Teaching Techniques:

The demonstrations should be presented as simply as possible. Re-emphasize the importance of bringing both hands down to the floor for the grounder and how one must flex the knees preferably with one leg ahead of the other. This may be relatively easy for some and extremely difficult for others. Concerning the fly-ball, point out that the hands must "get" to where the ball is and that the feet must move along with the hands. It is important that the flys are tossed lightly when the boys are learning how to handle them. Great care must be taken here to control any wild throwing.

Success should be quickly recognized. It is believed that individual instruction can be given quite easily from within these formations. The option of the "soft-soft ball" still remains.

Comments: (after conducting the research class)

1) It was very difficult for the majority of these boys to grasp the technique of supporting the lower body weight with the arms propped under the hips while attempting the "bicycle-kickover". This had to be demonstrated individually to almost every boy. On the other hand they enjoy attempting to bring the legs over the head to touch the floor (kickover).

2) It is recommended that two rather than three circles be utilized as there is simply too much confusion and the instructor is not able to sufficiently tend to individual problems.

3) A minority of the boys were actually frightened of the "fly ball". Much reassurance is necessary and the person throwing the "fly" must be quite dependable. An additional method which may be more effective for this type of boy is to let him toss the ball into the air and then attempt to catch it himself. Such an innovation should help to eliminate some of the hazardous factors which are involved in the original drill.

4) It is not easy for these boys to grasp the concept of properly fielding a ground ball. They are too eager just to get their hands on it so that they can throw it.

5) "Pepper Squat" by now a familiar activity again was well received as a culminating activity. The only real problem involves individual disciplinary cases or those few boys who for one reason or another do not wish to participate. The primary method of moving the ball was via the underhand toss despite whatever the instructor had directed them to use.

Skill-Oriented Program
Division I: Class XIII:

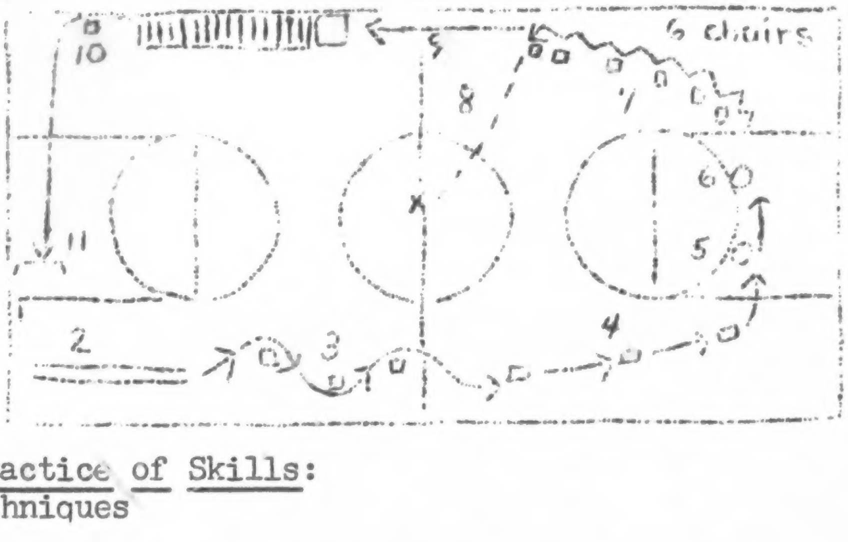
Class Organization and Specific Formations:	Time Allotment:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Instructional class	28-32 min.
-- Skills: (special) (22-28 min.)	
Culminating activity (parallel lires) (4-6 min.)	

4. Equipment and supplies
    - a. 1, 12' balance beam
    - b. 2, 8" stools (sturdy)
    - c. 1 softball
    - d. 1 basketball
    - e. 3, 10" x 10" x 10" wooden boxes
    - f. 1 large pasteboard box
    - g. 1, 5' x 10' tumblin mat
    - f. 10 traffic cones or folding chairs

Warm-up Activity: (Istructor Leads)
1. Dribble-pivot mimetics
2. Windmill, sitting
3. Bicycle and kickover
4. Kneebends (1-2 or down---up)

Instructional Class:
1. Objectives:
    - a. To determine to what extent the students will achieve in a selected battery of skills.
    - b. To determine the reaction of the students to a challenging but somewhat complex situation.

2. Explanation-Demonstration:
The description of the "obstacle course" is as follows: 1) The student begins here and gets directly on to the raised balance beam (see 2). 3) He then runs around (zig-zag) a three-chair obstacle and 4) runs and leaps over three 10" x 10" x 10" wooden containers. 5) He then takes the softball out of the pasteboard box, throws it against the wall, retrieves it, and places it back in the box. 6) He immediately takes the basketball out of the box and dribbles it a short distance to the end of the chairs (or cones) where he passes it to the instructor (or another student) (See 7 and 8). He then does a standing broad jump (see 9), goes around the chair (or cone) and hops via the one-foot hop to the finish line (see 11)



3. Participation-Practice of Skills:
See Teaching Techniques

4. Culminating Activity: (Optional - use if time and space permit)
How Far Back: Form two parallel lines, facing one another at a distance of 2 feet. The contest begins by having one boy toss the ball to the other. If it is caught, the former takes one step backwards. This process will continue until only one pair of boys have not dropped the ball. Continue!

Teaching Techniques:

In viewing the diagram below and the foregoing description of the "obstacle course", it can readily be ascertained that some of the boys may experience minor degrees of difficulty and such should not be totally unexpected.

The instructor should initially demonstrate the course by walking through and performing quite clearly each of the activities which are called for. He should then run through the course. He can be followed by one or two students who probably will not experience great difficulty (this is optional). The boys are to then go to the area which has been designated and in accordance with their roll number take their turn at running through the course on a practice basis. When each has completed this the instructor should point out mistakes and in some cases may take the individual student and run through a particular portion with him.

The student then goes through the course a second time with the directions to do everything as well as possible and as quickly as he is able. His performance in terms of skills is to be checked on the special evaluation sheet and the total time recorded.

It is recommended that the instructor or another dependable student be prepared to lead those students through the course that may encounter difficulty.

Comments: (after conducting the research class)

1) The boys reacted favorably to the "kneebend" (thigh parallel to the floor). The arms were outstretched in front of the body and the count was continuous. It is recommended that very little delay be allowed whenever this type of student is involved with an activity which does require balance for success.

2) The "Obstacle Course" was exceedingly successful from the standpoint of student acceptance and achievement. The built-in motivational factors due primarily to timing the individual boys did much to aid in holding the interest. They were very interested in how much time it took them and were not generally aware that they were also being evaluated at the same time.

3) None of the obstacles proved to be too difficult but it is recommended that the instructor or some dependable student walk along the raised balance beam to serve as a spotter for those who may need help. Also the instructor must stand ready to verbally assist a boy who has forgotten what to do! It is for this reason that another capable adult should be present to actively assist.

4) An innovation which is recommended is that of adding three seconds each time a boy does not clear an obstacle in a satisfactory manner. This is easily achieved by merely checking the special evaluation form in the appropriate place.

5) The culminating activity which was to have been used if time permitted was not in either of the two schools.

G. Division II: Progressive Skills and Skill Sequences Leading Up To Modified Games of Soccer and Volleyball:

1. Introduction: The thirteen class hours contained within this division, the activities of which modified "foot-eye" and "hand-eye" coordination, began on March 16, 1966, at both schools and ended on April 13, at Fernald and on April 20 at Wrentham due to differences in Easter Vacations.

2. Program Changes, Additions or Deletions: The chart below enumerates the specific changes, additions and deletions which were made following Jury recommendations, completion of the Pilot Study and final conferences with the Doctoral Committee.

Division II:

Key To Changes: Suggested By: J = Jury, C= Doctoral Committee, P = Pilot Study

Class I:
No changes.

Class II:
No changes

Class III:
No changes.

Class IV:
In the soccer goal shooting drill the shooter was to be instructed to reset the toppled pins or cones. (J--C)

Class V:
No changes.

Class VI:
No changes

Class VII:
The "Soccer Wall Volley" originally scheduled as the culminating activity was deleted. "Keep It Up," an activity involved with competitive volleying, was inserted in its place.

Class VIII:
No changes.

Class IX:
The underhand service utilizing the closed palm was presented here, a day in advance of the original plans. (P--C)
In serving for the first time the distance away from the net was not to be emphasized. (J--C)

Class X:
The underhand service utilizing the fist was introduced here instead of one day later as previously scheduled. (P)

Class XI:
Variations of serving were omitted and team passing was inserted as a skill sequence to be demonstrated and practiced.
Because of the difficulty involved the "Net Relay" was omitted as a culminating activity and "Simplified Volleyball" was inserted instead. (P)

Class XII:
No changes.

Class XIII:
The distance involved in the soccer accuracy test (Big Eye) was increased from ten to fifteen feet and the size of the frame was reduced from 4'x6' to 2'x4'.

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3. Outline of Daily Class Plans:
An outline of the thirteen daily class plans appears on the following page.

Day:	Objectives:	Specific Skills:	Culminating Activity:
1.	To introduce basic skills relative to soccer.	Passing Trapping Dribbling	Hot Ball
2.	To increase individual student understanding and skill development relative to basic soccer skills.	Passing with direction Trapping Dribble-Pass	Dribble-Pass Relay
3.	To reinforce basic soccer skills as they are utilized in a more complex manner.	Passing-Trapping Dribbling and passing ahead or laterally	Touch It If You Can
4.	To improve upon individual performances involving multiple-type soccer skills.	Passing ahead or laterally Dribble-Shoot	Touch It If You Can
5.	To introduce, further, coordinated movement techniques which demand a greater development of fundamental soccer skills.	Dribble-Shoot Goalie Blocking Passing laterally two boys on move	Simple Soccer
6.	To allow for continued development of selected fundamental soccer skills which have been previously presented.	Dribble-Shoot Goalie Tech. Passing laterally	Simple Soccer
7.	a.) To introduce formal counting where applicable concerning warm-up activities. b.) To present basic skills relative to volleyball.	Volleying individually as a group	Keep It Up
8.	To continue with emphasis on selected fundamental volleyball skills.	Volleying individually as a group	Keep It Up
9.	To continue reinforcement of skills basic to fundamental volleyball.	Volleying Passing with and without net Service-closed palm	Keep It Up
10.	To strengthen individual student development of basic volleyball skills.	Passing variations Service-fist	Pepper Squat Relay
11.	To promote continued development of volleyball skills which are generally more difficult.	Enrichment** Team passing Wall Volley	Simplified Volleyball
12.	To continue development of more difficult volleyball skills.	Enrichment Team Passing	Simplified Volleyball
13.	To formally evaluate the students concerning selected skills in soccer and volleyball.	Service accuracy Individual volley Soccer shooting accuracy	

**Enrichment denotes review

4. Presentation of Daily Class Plans:

Each class plan is presented on the pages that follow. Comments relative to their effectiveness and recommendations for further changes or revision are included.

Skill-Oriented Program
Division II: Class I:

Class Organization and Specific Formations:		Time Allotment:
1. Roll call and personal inspection (line)		2--4 min.
2. Warm-up activities (open)		4--6 min.
3. Instructional Class		28-32 min.
Skills: a. (circle), b. (line), .	(22-28 min.)	
Culminating activity (circle)	(4-6 min.)	
4. Equipment and supplies		
a. 4-6 slightly deflated soccer balls		

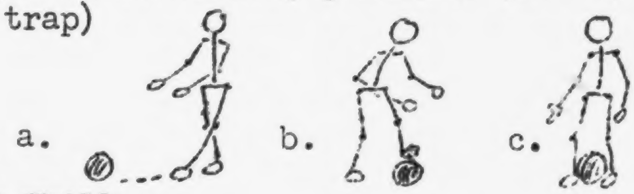
Warm-up Activity: (Instructor Leads)

1. Bicycle and kickover (follow leader)
2. Kneebends (arms outstretched, 1-2 count)
3. Straight-leg-stretchers (reach for imaginary line
4. Sit-ups (arms outstretched, from 8 to 10)

Instructional Class:

1. Objective:
   To introduce basic skills relative to soccer.

2. Explanation-Demonstration:
   a. Passing and/or kicking from stationary position (inside of foot)
   b. Trapping (single foot trap)
   c. Dribbling



3. Participation-Practice of Skills:
   a. Pass and trap: Each of three groups in circle formation. (1/2 available time)

   b. Dribbling drill: Form from three to five squads along a line which is twelve feet from the wall. The boys practice in dribbling the ball a distance of ten feet, trapping the ball, turning and passing it back via the inside-of-foot kick. (1/2 available time)

4. Culminating Activity:
   Hot Ball: Each group in a circle formation passes the ball around with the intention of getting it out of the circle. Each time a ball does go through, a point is scored against that group.

Teaching Techniques:

Although these skills may appear to be difficult, in view of previous experience they should be introduced and the students should be sufficiently accustomed to the procedures to take the presentation in stride.

It is thought that the single-foot-trap will allow the individual student to achieve more noticable success than would the double-leg technique. The students may find with some delight that to stop the rolling ball with one's foot is really fun.

The inside-of-foot kicking and/or passing techniques must be carefully demonstrated as this will run constant competition to the more desirable toe kick (from the standpoint of the student.) Dribbling is a unique skill and probably will take longer for these boys to develop than any other single skill! Basic drills involved in this plan lend themselves to individual instruction which should be given whenever necessary.

Comments: (after conducting the research class)

1. Warm-up activity: The "straight-leg stretcher" is quite difficult for the students to comprehend. They have difficulty in pressing the hands back toward an imaginary line behind them. The performance of the "sit-ups" (arms outstretched) was not particularly good. It appeared as though they were confused after having been tested (AAHPER) originally with the arms behind the neck. It is obvious that most of the boys need further development physically so that they are able to perform this activity.

2. The initial drill may be more effective if it is done in one large circle. Mistakes can be pointed out more readily and better disciplinary control is possible.

3. In the second drill only three squads would seem to be more effective and better control is possible.

4. The reaction to soccer is good. The boys like to kick the ball and to attempt to trap it. The concept of dribbling is difficult at this stage and they would rather kick it and then run after it.

5. The culminating activity was acceptable, but for purposes of control only one circle is recommended.

Skill-Oriented Program
Division II: Class II:

Class Organization and Specific Formations:	Time Allotment:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Instructional Class	28-32 min.
Skills: a. (circle), b. (squad), c. (pepper)	(22-28 min.)
Culminating activity (relay)	(4-6 min.)
4. Equipment and supplies	
a. 5-7 slightly deflated soccer balls	

Warm-up Activity: (Instructor Leads)

1. Trunk twister (give starting directions)
2. Kneebends
3. Straight-leg stretchers (1-4 count)
4. Sit-ups (from 10 to 12)

Instructional Class:

1. Objective:
   To increase individual student understanding and skill development relative to basic soccer skills.

2. Explanation-Demonstration:
   a. Enrichment of previous skills
   b. Passing with emphasis on direction

3. Participation-Practice of Skills:
   a. Pass and trap: The circle drill of the previous class hour is again utilized. (1/4 available time)

   b. Dribbling: The dribbling drill of the previous class hour is again presented. (1/4 available time)

   c. Accuracy passing: Form three pepper groups. Each group begins a concentrated effort to pass and trap the ball with greater accuracy. The leader passes to each of the others twice (two times around) and then rotates. (1/2 available time)

4. Culminating Activity:
   Dribble-Pass Relay: Form three relay groups. When a whistle signal is given the first boy in each line dribbles a distance of twelve feet, stops, turns around, and passes the ball back to the next boy in line. If the ball should be kicked wildly the boy must retrieve it and start over again. The competitive relay continues.

Teaching Techniques:

By utilizing drills which have been used previously it is hoped that the boys can devote their attention to the development of skills.

The pepper drill allows each boy an opportunity to handle the ball several times in a short span of time and also places more emphasis on a steady performance. Because the complexity of the skills do increase in the class hours to follow, it is quite important that those boys experiencing greater difficulty be given as much personal assistance as is possible.

Comments: (after conducting the research class)

1. Some improvement was noted in the "straight-leg-stretcher" but it was difficult to prevent the boys from stopping during this particular activity. The "trunk twister" was confusing as they had difficulty grasping the circular motion concept.

2. The pepper drill was satisfactory. Problems did occur on determining who would be the next leader as the so-called highly developed boy does tend to crowd his way to that position more often than he should.

3. The "personal assistance" called for in the Teaching Techniques is all important.

4. The culminating activity is effective. However, a boy should sit down after he has completed his part in the relay as far less confusion seems to result. No more than two relay groups are recommended.

Skill-Oriented Program
Division II: Class III:

Class Organization and Specific Formations:	Time Allotment:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Instructional Class	28-32 min.
Skills: a. (pepper), b. (shuttle), c. (modified shuttle)	(22-28 min.)
Culminating activity (circle)	
4. Equipment and supplies	
a. 3-4 slightly deflated soccer balls	

Warm-up Activity: (Instructor Leads)

1. Head, shoulders, knees and toes (follow the leader)
2. Trunk twister (1-4 count or verbal)
3. Straight-leg-stretchers
4. Sit-ups (from 12 to 14)

Instructional Class:

1. Objective:
   To reinforce basic soccer skills as they are utilized in a more complex manner.

2. Explanation-Demonstration:
   a. Dribbling and passing straight ahead
   b. Dribbling and passing laterally

3. Participation-Practice of Skills:
   a. Pass and Trap: The pepper drill introduced during the previous class hour emphasizing passing and trapping is again utilized. (1/3 available time)

   b. Dribble and Pass: Form three shuttle groups which are approximately twenty feet apart. A boy on one side dribbles to an approximate mid-point and passes the ball to the first boy on the opposite side. That boy traps the ball, waits for the oncoming student to go by, and then continues the drill. (1/3 available time)

   c. Dribble and Pass Laterally: Basically the same drill as above is utilized with the exception that the boy dribbles to a mid-point and passes laterally to the first boy in the other line. The receiver traps the ball and continues the drill in the same manner. (Some difficulty can be expected to arise during this drill in that either foot can be used for passing depending on which line the boy is coming from.) (1/3 available time)

4. Culminating Activity:
   Touch It If You Can: Form two circles. One boy is in the middle of each and attempts to "touch" the ball with his feet as it is being passed around or through the circle area. Each boy should be given at least one opportunity to be in the middle.

Teaching Techniques:

It is thought that dribbling abilities should have progressed to the point that multiple-type skills can now be presented to these boys. In dribbling and passing straight ahead the inside-of-foot technique should again be emphasized. There will, no doubt, be considerable kicking from the toe, but it should be pointed out that this may be more difficult to trap because of the speed and/or wildness that could occur.

It should not be insisted that the students keep their heads up as most of them likely will experience considerable difficulty with dribbling and passing.

A boy should not be forced to use his weakside foot expecially if he is experiencing even mild difficulty with the other. The culminating activity will provide the first experience for passing the ball under pressure.

Comments: (after conducting the research class)

1. "Head, shoulders, knees and toes," as an activity remained very popular. The boys like to shout the words. Although the performances in the "straight-leg-stretcher" and the "sit-ups" showed slight improvement, those in the "trunk twister" generally did not. Much patience is required if this particular activity is to become successful for usage with the educable mentally retarded boy.

2. In the second drill it is recommended that no more than two shuttle groups be used. The concept of dribbling and passing is not at all easy for the educably mentally retarded boy to grasp.

3. The final drill calling for the lateral pass did not go well and additional programming did appear to be necessary. Specifically it is recommended that roped off lanes be utilized for drills (b.) and (c.).

4. The culminating activity generally progressed well; however, some will pass the ball directly towatd the center boy so that they can get into that position themselves. To counteract this tendency it is recommended that the instructor put each boy into the center based on an orderly sequence regardless of who it was who last kicked the ball.

Skill-Oriented Program
Division II: Class IV:

Class Organization and Specific Formations:	Time Allotment:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Instructional Class	28-32 min.
Skills: a. (shuttle), b.(modified shuttle), c.(squad)	(22-28 min.)
Culminating activity (circle)	(4-6 min.)

4. Equipment and supplies
    - a. 5-6 slightly deflated soccer balls
    - b. 6-10 Indian clubs or traffic cones
    - c. Traffic cones or chairs sufficient for completion of lanes
    - d. 80' clothes line rope for lanes

Warm-up Activity: (Instructor Leads)
1. Head, shoulders, knees and toes
2. Scramble (verbal directions)
3. Trunk twister
4. Sit-ups (from 12 to 15)

Instructional Class:

1. Objective:
   To improve upon individual student performance involving multiple-type soccer skills

2. Explanation-Demonstration:
   a. Enrichment of previous skills
   b. Dribbling and shooting at a target

3. Participation-Practice of Skills:
   a. Dribble and Pass: The straight-line dribbling and passing drill, explained during the previous class hour is again presented. (Roped off lanes will be used.) (1/4 available time)

   b. Dribble and Pass Laterally: The dribbling and lateral passing drill presented the previous class hour is to be held in the same manner. More emphasis should be placed on passing accuracy. (Roped off lanes will be used.) (1/4 available time)

   c. Dribbling and Goal Shooting: Form from three to five squads. Indian clubs or traffic cones are placed directly in front of each squad on a line twenty feet away. The boys in each squad are instructed to dribble to a taped line five feet from the clubs and then attenpt to knock it over (two clubs or cones may be used). The boy knocking over the club should be the one to place it back on the line. (1/2 available time)

4. Culminating Activity:
   Touch It If You Can: This activity is carried on in the same manner as the previous class hour.

Teaching Techniques:

The shooting drill should prove to be self-motivating and may produce better results than had been previously anticipated. The instructor may, if he so desires place two clubs side by side so that success can be even more evident to the boys. They must be reminded, however, to shoot from the five foot line and should not be allowed to dribble right up to the clubs.

The absence of drills concerning the utilization of the head and/or body for blocking purposes is obvious. This has been intentional as it is not believed that these students, in the time allowed, could really benefit by such instruction.

Comments: (after conducting the research class)

1. The "scramble" proved to be another very popular warm-up activity and this along with the equally effective "head, shoulders, knees and toes," seemed to help increase the level of performance in the more difficult "trunk twister" and "straight-leg-stretcher."

2. Roped-off lanes were utilized for the first two drills (a and b). The increased success was gratifying to the students.

3. As it is stated in the Teaching Techniques, the shooting drill (c) is very self-motivating but in some instances the boy will dribble right up to the cone or club before knocking it over.

4. The traffic cones are often used as megaphones. Indian clubs do not present this problem.

5. The culminating activity was more successful than during the previous class hour. It is more effective when the instructor assigns the next boy who is to be in the center of the circle.

Skill-Oriented Program
Division II: Class V:

Class Organization and Specific Formations: Time Allotment:

1. Roll call and personal inspection (line) 2--4 min.
2. Warm-up activities (open) 4--6 min.
3. Instructional class 28-32 min.
   Skills: a. (squad), b. (divided squad), (22-28 min.)
   Culminating activity (team soccer) (4-6 min.)
4. Equipment and supplies
   a. 3-5 slightly deflated soccer balls
   b. 6-10 traffic cones to aid marking goal areas
   c. 8 colored jerseys

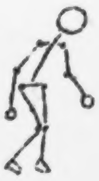
Warm-up Activity: (Instructor Leads)

1. Head, shoulders, knees and toes
2. Scramble
3. Trunk twisters
4. Squat-thrusts (1-4 count)

Instructional Class:

1. Objective:
   To introduce further, coordinated movement techniques which demand a greater development of fundamental soccer skills.

2. Explanation-Demonstration:
   a. Skills involving goalie
      1) blocking the ball
      2) using the hands
   b. Two-man lateral passing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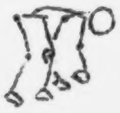
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3. Participation-Practice of Skills:
   a. Dribbling and Goal Shooting: The dribbling and shooting drill from the previous class hour is again utilized with the following exception: Each boy within a squad takes a turn at being a goalie for three shots and then rotates. (1/2 available time)

   b. Passing and Goal Shooting: Utilizing the same basic formation each group sub-divides and two boys move forward attempting to pass and repass the ball. A goalie is again used and a shot is taken by one of the two boys. A three-shot goalie tenure should remain in effect. (1/2 available time)

4. Culminating Activity:
   Simple Soccer: Form two teams. Each will protect one-half of the court area and six foot lanes will be used as goals on each end. The ball must pass over the front goal line for a point to be scored. Players other than the goalie can go anywhere on the floor and only a ball that rolls under something or out of the room is declared out-of-bounds. Any violation and/or foul allows the other team a direct penalty kick ten feet from goal line. Rules regarding a kick-off following a score should be observed.

Teaching Techniques:

The dribbling and shooting practice is being continued, with a goalie instead of the Indian clubs. Much care should be taken in explaining that the goalie is allowed to use his hands or some sincere argument can be expected from some of the boys. Again it is important that the shot be taken from the designated line instead of the boy attempting to dribble right up to the goalie.

When the groups are set for the two-man lateral passing drill some verbal emphasis certainly will have to be placed on moving in a straight line as some boys may have a tendency to follow the ball. It can be expected that many will experience difficulty here but it is thought that the opportunity to score a goal may help to urge the boy toward a better performance.

Despite the difficulty involved success will occur in getting the ball past the goalie and he will not have to be urged to do this. Individual attention should be given to those who require same and where time and class organization permit.

Comments: (after conducting the research class)

1. The "squat thrusts" were not as difficult for the boys this time and carry-over was evident. The "trunk twisters" remain difficult and do contribute to frustrations.

2. The initial experiences for a boy of being a goalie were not particularly favorable. They were, in many instances, too close to the ball. Options of shooting (stationary) from a distance, or requiring the ball to pass between two clubs or cones and then reach a goalie who is stationed approximately ten feet back of this line, are recommended.

3. The passing (two-man) in the second drill proved difficult and it was necessary for the instructor to actively participate with many of the boys. Two divided squads would appear to be adequate and in the case of some groups it may be necessary to utilize only one divided squad.

4. Simple soccer, as a culminating activity, went extremely well. The boys certainly had no desire to stop when the time alloted had been spent.

Skill-Oriented Program
Division II: Class VI:

Class Organization and Specific Formation:		Time Allotment:
1. Roll call and personal inspection (line)		2--4 min.
2. Warm-up activities (open)		4--6 min.
3. Instructional Class		28-32 min.
Skills: a. (squad), b. (divided squad)	(22-28 min.)	
Culminating Activity (team soccer)	(4-6 min.)	

4. Equipment and supplies
   - a. 5-6 slightly deflated soccer balls
   - b. 9-15 folding chairs or traffic cones
   - c. 3-5 Indian clubs
   - d. 8 colored jerseys

Warm-up Activity: (Instructor Leads)

1. Head, shoulder, knees and toes
2. Side-straddle-hop (1-2 count or clap-slap)
3. Scramble
4. Squat-thrusts

Instructional Class:

1. Objective:
   To allow for continued development of selected fundamental soccer skills which have been previously presented.

2. Explanation-Demonstration:
   Enrichment of previous skills!

3. Participation-Practice of Skills:
   a. Obstacle Dribbling and Shooting: Form from three to five squads. The boys practice dribbling through a three-chair (or cone) obstacle and then attempt to knock over the indian club which is ten feet from the last chair. (1/2 available time)

   b. Lateral Passing and Shooting: The two-man lateral passing drill, introduced during the previous class hour and featuring a goalie, is again utilized in the same manner by each of the three divided squads. (1/2 available time)

4. Culminating Activity:
   Simple Soccer: This team activity is to be carried on in the same manner as the previous class hour.

Teaching Techniques:

The zig zag dribble technique may prove quite difficult for these youngsters but it is inserted here with the thought that they will consider it a challenge and, therefore, push that much harder to achieve success. The reward of having the opportunity to knock over the indian club is also present.

The difficult two-man lateral passing maneuver is brought back for the finale, and it should prove interesting to see how much carry-over is evident from the previous class hour. The culminating activity should reflect the development of the skills which have been presented.

Comments: (after conducting the research class)

1. The "side-straddle-hop" like the "squat thrust" was handled quite well by the boys. It can be stated here that the educable mentally retarded boy, at least those involved in this study, does appear to lack coordination and/or the attention to detail moreso than the so-called normal boy. This is not to suggest that repeated practice under favorable conditions would not aid the retardate in improvement of coordination.

2. The initial drill is acceptable; however, some of the boys simply fail to grasp the concept of dribbling around an obstacle in a "zig zag" fashion.

3. The second day for the two-man lateral passing drill brought greater success and more evidence of self-confidence...However, they have difficulty in trapping the ball with the weakside foot which is not easy even for the normal student.

4. Simple soccer was again greatly appreciated by the boys and without doubt this activity has produced the highest level of competition to date.

5. It is apparent that dribbling as an isolated skill will take the typical educable mentally retarded boy a much longer time to learn. Despite this, it is possible for him to achieve as this was well illustrated during the six class hours devoted to the learning of soccer skills.

6. Soccer skills must be evaluated, on the basis of this particular experiment, as very worthwhile for the educable mentally retarded boy.

Skill-Oriented Program
Division II: Class VII:

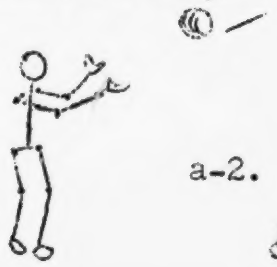
Class Organization and Specific Formation: Time Allotment:
1. Roll call and personal inspection (line) 2--4 min.
2. Warm-up activities (open) 4--6 min.
3. Instructional class 28-32 min.
    Skills: a. (squad), b. (circle) (22-28 min.)
    Culminating activity (circle) (4-6 min.)
4. Equipment and Supplies
    a. 6 beachballs (large circumference)

Warm-up Activity: (Instructor Leads)
1. Side-straddle-hop
2. Scramble
3. Squat thrusts
4. Running in place (vary the pace)

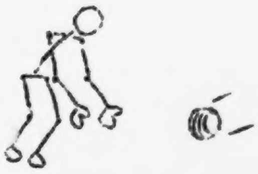
Instructional Class:
1. Objectives:
    a. To introduce formal counting, where applicable, concerning warm-up activities
    b. To present basic skills relative to volleyball and modified forms thereof

2. Explanation-Demonstration:
    a. Individual volleying
        1 from above waist
        2 from below waist
    b. Group volleying

a-1.



a-2.



3. Participation-Practice of Skills:
    a. Individual Volleying: The initial drill utilizes from four to six squads (2 or 3 boys in each) and is concerned specifically with the individual learning how to volley a ball. The squads are divided so that one boy is tossing to two others on an alternate basis. Following from four to six attempts the rotation is made. (1/2 available time)

    b. Circle Volleying: Form three circles: With one ball in each, attempts are made to keep it up in the air with each boy doing his part to contribute to the group effort. (1/2 available time)

4. Culminating Activity:
    Keep It Up: The circle formation is the same as for the group volleying drill. Upon a signal from the instructor the groups begin to volley. The team that keeps the ball up for the longest time is recognized as the winner of that contest. There is no regulation as to how many times one boy may volley the ball in succession; however, such excessive action should be tactfully handled by the instructor.

Teaching Techniques:

It is very important that this participation period and the one following be devoted to the proper skills involved in volleying. Volleying is perceived as different from passing in that the emphasis is simply to keep the ball up well above the level of the head. The concept of changing the position of the hands (10-point method) depending on whether the ball is above or below the waist is quite important and should not be underestimated. For purposes of better learning, the larger and lighter BEACHBALL should be used for the entire period whereas in the class hour to follow the official volleyball is to be utilized if the students are ready.

As the drills have already been explained above, it is obvious that the initial one is concerned with the individual and the other with the group. In both cases there is good opportunity for individual instruction and this should be given whenever possible.

Comments: (after conducting the research class)

1. "Running in place" was again well accepted as a warm-up activity. It is obvious that the detail directed toward skill development, afforded by this type of program, has helped the boys develop this activity and others to a greater degree of proficiency.

2. A very effective demonstration must be given concerning how to handle the beachball. Despite the size and weight of the ball numerous students are apt to step back and let it hit the floor. The Pilot Study had already indicated that this was even more probable concerning a regulation volleyball.

3. The initial drill was fairly successful; however, the boys who lack skill are very apt to shy away, from the responsibility which is demanded.

4. The second drill worked well. The most obvious problem was for the instructor to try and prevent the boys from "blasting" the ball instead of volleying it in a normal fashion.

5. It is recommended that emphasis placed on the importance of the ten-point method (see Teaching Techniques) be decreased with more concern exerted toward the boys' ability to keep the ball up by whatever means he can. Success is so important here and goes a long way toward developing the skills involved.

6. It is recommended that the culminating activity formation be changed to one large circle involving all of the boys. Two circles or even three can be utilized later when ability permits.

Skill-Oriented Program
Division II: Class VIII:

Class Organization and Specific Formations:		Time Allotment:
1. Roll call and personal inspection (line)		2--4 min.
2. Warm-up activities (open)		4--6 min.
3. Instructional class		28-32 min.
Skills: a. (squad), b. (circle)	(22-28 min.)	
Culminating activity (circle)	(4-6 min.)	

4. Equipment and supplies
   - a. 4-6 volleyballs
   - b. 4-6 beachballs (large circumference
   - c. 4-6 light-weight balls*
   - d. 1 volleyball net, 6' high

Warm-up Activity: (Instructor Leads)
1. Arm circles (start small, then large)
2. Side-straddle-hop
3. Windmill (give direction, 1-4 count)
4. Squat-thrusts
5. Running in place

Instructional Class:

1. Objective:
   To continue with emphasis on selected fundamental volleyball skills

2. Explanation-Demonstration:
   Enrichment of previous skills

3. Participation-Practice of Skills:
   The drills held during the previous class hour are again carried on in the same manner except that regulation volleyballs or light-weight balls are utilized instead of beachballs. Whether or not the instructor chooses to use the net for the initial drill is optional.

4. Culminating Activity:
   Keep It Up: This activity is the same one described during the previous class hour. An option of letting the ball bounce once before it is volleyed can be inserted by the instructor if the boys are having difficulty.

Teaching Techniques:

It is probable that the regulation volleyball will cause more difficulty, at least with some boys, than did the beachball. The conception of how to volley and the skill involved should come about somewhat easier as a result of having had the larger and lighter balls. If the level of the class is such that the volleyball is not practical, the beachballs or light-weight balls can again be used for the group volley drill.

The nets should be put up prior to the beginning of class at a height of six feet. The net can be utilized for at least part of the initial drill if the instructor believes this to be feasible. *Light-weight balls which are the same size as a regulation volleyball are lighter than an ordinary playground ball.

Comments: (after conducting the research class)

1. This was the class hour where five warm-up activities were included instead of the usual four. The students showed no signs of even realizing this but it did mean that the instructor had to watch his available time more carefully.

2. The usage of a regulation volleyball is too difficult for some and the substitution of light-weight balls or the beachballs where necessary is recommended. The beachballs seemingly generate much added enthusiasm.

3. The utilization of a single large circle in the culminating activity is still recommended.

Skill-Oriented Program
Division II: Class IX:

Class Organization and Specific Formation:	Time Allotment:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Instructional class	28-32 min.
Skills: a. (circle), b. (divided squad), c. (divided squad)	(22-28 min.)
Culminating activity (circle)	(4-6 min.)
4. Equipment and supplies	

a. 3-4 volleyballs
b. 3-4 beachballs, large circumference
c. 3-4 light-weight balls
d. 1 volleyball net, 6' high

Warm-up Activity: (Instructor Leads)

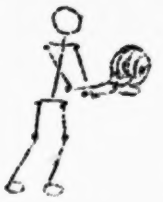
1. Arm circles
2. Side-straddle-hop
3. Windmill
4. Push-ups (regular, from 6 to 8 on ind. basis)
5. Running in place

Instructional Class:

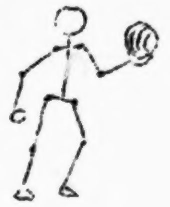
1. **Objective:**
   To continue reinforcement of skills basic to fundamental volleyball

2. **Explanation-Demonstration:**
   a. Passing ball without net (over a line)
   b. Passing ball with net
   c. Underhand service with closed palm

ab.



c.



3. **Participation-Practice of Skills:**
   a. Circle Volley: The initial drill is the "circle volley", which is continued from the previous two class hours. Slightly more verbal emphasis should be place on greater perfection of the volleying technique. (1/4 available time)

   b. Passing: Each of the three squads divides into two sub-groups and faces each other on opposite sides of the net. Utilizing one ball, the boys in each squad attempt to pass the ball back and forth over the net. (1/4 available time)

   c. Serving: Utilizing the same formations as above two boys in each squad serve to the three who are on the other side of the net. After a boy has served six times he changes places with one of the receivers. This is a continuous drill designed to allow every boy as much practice as possible in serving. (1/2 available time)

4. **Culminating Activity:**
   Keep It Up: Inasmuch as this is the third consecutive time for this activity, more emphasis should be placed on the competitive aspects and the large single circle should not be used unless the skill-level of the class warrants it.

Teaching Techniques:

It is thought that following a review of the volley that the students should logically be ready to move on to passing. The stress here becomes that of having the boys apply conscious direction to the volley so that it will, in fact, become a pass. Some of the boys more than likely will be too excited just in contacting the ball and may require individual assistance. Questions concerning whether or not the fist can be used for passing the ball should be answered in a negative manner as permission to do so could result in much added confusion. If a large majority of the class is experiencing serious difficulty with passing, the beachballs or light-weight balls can, at the discretion of the instructor, be substituted for part of the alloted time.

The service should be taught as it ordinarily would be with the ball held out from the body at waist level and the feet in a stride position. The front foot comes forward slightly just before the ball is contacted by the closed palm. The eye must be kept on the ball. The closed-palm technique is being endorsed here because of the three primary underhand service methods, this appears to offer the best opportunity for the student to get the ball over the net. More immediate individual success can, therefore, be realized.

Certainly effective serving should not be expected from these students at the outset and disappointment may be expressed by some. Individual assistance is urged whenever this is possible.

Comments: (after conducting the research class)

1. The regular "push-up" proved difficult for the majority but seemingly there were more efforts made than had been evident during the initial class hours when the modified version has attempted. "Arm circles" in their second day were successful only if the instructor was very careful in giving verbal directions as to how large the circles should become.

2. Despite progression in the learning of skills, the boys had somewhat of a difficult time with the concept of keeping the ball up. Many are too eager to "connect" and literally "blast" the ball out of the immediate area.

3. One cannot be too concerned with form in serving. Success in just getting the ball over the net is far more meaningful to this type of student.

4. The "Keep It Up" culminating activity is recommended. The single circle should be retained if the level of skill is too erratic.

Skill-Oriented Program
Division II: Class X:

Class Organization and Specific Formation:	Time Allotment:	
1. Roll call and personal inspection (line)	2--4 min.	
2. Warm-up activities (open)	4--6 min.	
3. Instructional Class	28-32 min.	
Skills: a. (pepper), b. (divided squad), c. (divided squad)		(22-28 min.)
Culminating activity (pepper)		(4-6 min.)

4. Equipment and supplies
    - a. 3-4 volleyballs
    - b. 3-4 light-weight balls
    - c. volleyball net, 6' high
    - beachballs should be available for emergency use

Warm-up Activity: (Instructor Leads)

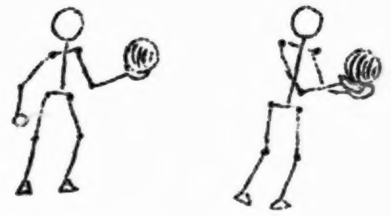
1. Arm circles
2. Windmill
3. Lift em and spread em (verbal direction)
4. Push-ups (from 7 to 9 on ind. basis)
5. Running in place

Instructional Class:

1. Objective:
   To strengthen individual student development of basic volleyball skills

2. Explanation-Demonstration:
   - a. Enrichment
   - b. Underhand service with fist

b.



3. Participation-Practice of Skills:
   - a. Passing: Form three pepper groups. From this familiar formation the leader attempts to pass the ball successfully to each of the other boys. The instructor gives a whistle signal for the rotation to occur. (1/3 available time)

   - b. Passing: The "net pass" drill is continued from the previous class hour with greater emphasis on consistency. (1/3 available time)

   - c. Serving: Utilizing the same formation as above (three on one side and two on the other) each of the three groups occupies approximately one-third of the net area. The serving drill, explained during the previous class hour, then continues with emphasis on using the fist. (Boys should stand at least ten feet from the net when they attempt to serve.) (1/3 available time)

4. Culminating Activity:
   Pepper Squat Relay: With each group in a pepper formation, the leader passes (conventional pass) the ball to each boy who in turn attempts to return it via the volleyball pass. If the pass is successful, the boy squats down. When all have squatted, the group rotates once to the left and the competitive relay continues. (Ind. contests end with each rotation.)

Teaching Techniques:

In view of the importance attached to grasping the fundamental skills it is thought that additional class work on the volley and/or pass is quite necessary. The pepper-drill represents the first type of pressure that has been applied to the individual to really produce.

The serving technique should again be shown in detail. The usage of the fist may prove much easier for some, but the difference in accuracy should also be mentioned in very simple terms.

Undoubtedly there will be problems relative to serving and a student should be allowed to use one of the other underhand service methods if such will aid him in getting the ball over the net. Too, there is nothing against attempts at the overhand service but such may create a rather unsuccessful fad among these boys and thus it should not be demonstrated or encouraged.

Comments: (after conducting the research class)

1. For the most part, the same problems occured with the "lift em and spread em" activity which did previously. It is recommended that the boys be instructed to pat their stomachs lightly. This innovation does provide motivation and helps to keep the legs at a lower height from the floor.

2. Passing in a pepper formation even without the net proved to be somewhat difficult. This was especially true if the leader was one who was weak. It may be advisable, with these boys, to select the leader based on his ability rather than giving everyone an opportunity.

3. The second drill was highly successful. It is necessary, however, to constantly keep these boys within their alloted areas. Masking tape may be helpful in this regard.

4. Reaction was mixed concerning the use of the fist to serve. Quite obviously the important thing to these boys is simply to get the ball over the net and because of this it was difficult to keep them working on a particular method.

5. Concerning the culminating activity it is recommended that a particular order not be insisted upon. It is too difficult for most of these boys to comply to such a rule.

Skill-Oriented Program
Division II: Class XI:

Class Organization and Specific Formations:	Time Allotment:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Instructional class	28-32 min.
Skills: a. (semi-shuttle and squad), b. (semi-shuttle)	(22-28 min.)
Culminating activity (team volleyball)	(4-6 min.)

4. Equipment and supplies
   - a. 3-4 volleyballs
   - b. 3-4 light-weight balls
   - c. volleyball net, 6' high

   beachballs should be available for emergency use

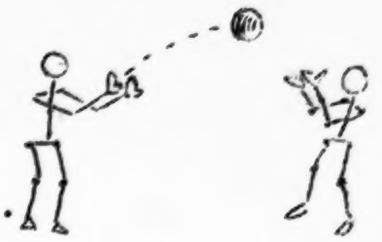
Warm-up Activity: (Instructor Leads)
1. Arm circles
2. Windmill
3. Lift em and spread em
4. Push-ups (from 8 to 10 on ind. basis)
5. Rope jumping mimetics (alter the pace and the type of jump)

Instructional Class:

1. Objective:

   To promote continued development of volleyball skills which are generally more difficult.

2. Explanation-Demonstration:
   - a. Concentrated passing
   - b. Wall volley technique
   - c. Team passing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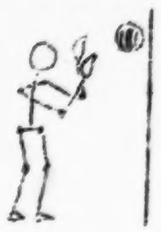

b.

3. Participation-Practice of Skills:
   - a. Concentrated Passing: Form two semi-shuttle groups. The ball is passed (conventional pass) by the single boy high above the net and is returned, via the volleyball pass, by the first boy in line on the other side. He then goes to the back of the line and the drill continues. The instructor changes the "throwers" with a whistle signal. While this is employed by two groups, the third one practices on the wall volley which simply has a boy volleying the ball off of the wall in continuous fashion from a distance of four feet. When he fails, the next boy steps in and the drill continues. The instructor rotates the groups on an approximate five minute basis. (1/2 available time)

   - b. Team Passing: Without altering the basic formation, the "three times and over" practice session begins. This activity places four boys on one side of the net with one on the other. The single boy passes the ball across the net and those on the other side must pass the ball about for three times before it can come back across the net. The students are encouraged to count out loud and the instructor should rotate the boys with a whistle signal. (1/2 available time)

4. Culminating Activity:

   Simplified Volleyball: Divide the class into two relatively equal teams. No rules regarding a maximum number of passes on a side is in effect and "ping pong" will be accepted but not encouraged. The boys are to be placed, as nearly as possible, in a 3-1-3 formation with the rotation going to the left and the right forward picking up the service. A score is awarded any time the opposition fails to return the ball. A boy receives only one service (over the net) and two attempts to succeed. A bounce can be allowed for the ball coming over the net (at discretion of instructor) but not for the service.

Teaching Techniques:

While the passing is not new, the semi-shuttle drill does cause the student to respond in a positive manner if success is to be realized. Speed should not be emphasized and some boys may not be capable of handling the "point position."

The wall volley should also pressure the boy to utilize the skills that have been introduced. There is nothing wrong with each boy keeping a record of how many consecutive vollies he achieves. The lack of wall boundaries should aid in making this drill highly motivating.

In the "three times and over" session teamwork becomes a prime consideration and this should be nurtured in each group. Despite the fact that excitement may over-ride counting ability and concentration, the important thing is to prevent the single "ping-pong" pass back and forth over the net. Without a doubt, the phrase "keep it up high," will have to be uttered considerably if success is to be realized.

Comments: (after conducting the research class)

1. Rope-jumping mimetics in being brought back a second time proved again to be extremely popular with the boys. It was obvious that even their limited exposure to jumping had helped them to appreciate this activity.

2. The semi-shuttle drill is practical; however, in the case of some boys, the concept of the relay pattern is confusing.

3. It is somewhat difficult to run the semi-shuttle drill and the wall volley at the same time. If the ability of the class does permit it is a more effective utilization of space and time.

4. It was difficult for the educable mentally retarded boy to successfully grasp the "three times and over concept." To simply encourage them to keep the ball moving back and forth across the net is deemed more important.

5. Like simple soccer there was much excitement in "Simplified Volleyball." It was somewhat difficult to enforce any type of rotation and numerous sessions would have to be held before this pattern could be thoroughly grasped.

Skill-Oriented Program
Division II: Class XII:

Class Organization and Specific Formations:	Time Allotment:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Instructional class	28-32 min.
Skills: a. (semi-shuttle and squad), b. (semi-shuttle)	(22-28 min.)
Culminating activity (team volleyball)	(4-6 min.)

4. Equipment and supplies
   - a. 3-4 volleyballs
   - b. 3-4 light-weight balls
   - c. volleyball net, 6' high
   - beachballs should be available for emergency use

Warm-up Activity: (Instructor Leads)
1. Arm circles
2. Wing-flapper(give dir.,1-4count)
3. Lift em and spread em
4. Push-ups (from 9 to 10 on ind. basis)
5. Rope jumping mimetics

Instructional Class:

1. Objective:
To continue development of more difficult volleyball skills

2. Explanation-Demonstration:
Enrichment of previous skills

3. Participation-Practice of Skills:
   a. Concentrated Passing: The semi-shuttle drill is again utilized as is the wall volley. Both of these activities were described during the previous class hou. The same procedures regarding rotation of groups are in effect. (1/2 available time)

   b. Team Passing: The "three times and over" practice session is again held in the same manner as the previous class hour. (1/2 available time)

4. Culminating Activity:
Simplified Volleyball: This activity is carried on in the same manner as the previous class hour.

Teaching Techniques:

It is recommended that formal drill-type conditions prevail as much as possible during these practice sessions which are being repeated, so that maximum learning and/or developmental opportunity can exist. Also, because this is the final class hour involving volleyball skills every effort should be made to help those boys who have not progressed in a satisfactory manner.

It is expected that the culminating activity will be more effective; however, due to the difficulty involving certain skills successful team performances may not be evident.

Comments: (after conducting the research class)

1. The carry-over concerning the "wing-flapper" activity was evident; however, it is still difficult for most of the boys to understand and/or remember the four distinct movements which are involved.

2. The semi-shuttle drill is definitely classed as a successful one. The improvement in group performances over the previous class hour was quite evident.

3. Much patience is required on the part of the instructor in teaching the "three times and over" concept to educable mentally retarded boys.

4. Simplified Volleyball, in its second day, could not be considered highly successful. The skills simply had not developed sufficiently and performances were very spotty. Discipline can also be a problem especially when the skill levels vary so greatly. For example, some boys take delight in striking the opposite wall with their service attempt while others feel badly if they cannot make contact with the ball each time it comes over the net.

Skill-Oriented Program
Division II: Class XIII:

Class Organization and Specific Formations:	Time Allotment:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Instructional class Special evaluation	28-32 min.
4. Equipment and supplies	

- a. 3 volley balls
- b. 3 soccer balls
- c. rectangular wooden frame (1" x 2" material) 2' x 4'
- d. volleyball net, 6' high
- e. 4, 12' balance beams

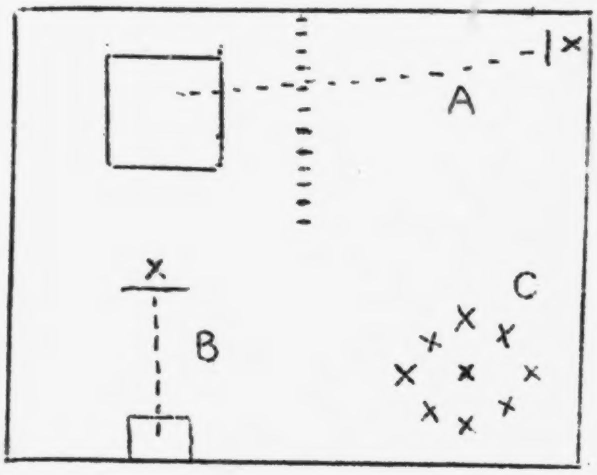
Warm-up Activity: (Instructor Leads)

1. Wing-flapper
2. Rope jumping mimetics
3. Lift em and spread em
4. Push-ups (at least 10 on ind. basis)
5. Chu-chu train (treadmill, imitate sounds)

Instructional Class:

1. Objective:
   To formally evaluate the students concerning selected skills in soccer and volleyball

2. Explanation-Demonstration:
   - a. Serving into the hole
   - b. Shooting at the big eye
   - c. Individual volley



3. Participation-Practice of Skills:
   Note: Because of the time necessary to complete the evaluation, no practice can be allowed. The three evaluative procedures outlined below are approached via the group station method. The boys are to go to one testing area and remain there until the signal is given for them to move.

   a. Serve In The Hole: Each boy is given three consecutive opportunities to serve the ball into the 12' x 12' "hole" from behind the regular serving line (20 feet from net). Each time the ball goes over the net the boy is awarded one point and each time the ball goes over the net and into the "hole", he is awarded two points. Balls not clearing the net count as one of the three attempts. The boy to follow waits behind the server and supplies the balls, while the others help to retrieve the balls and roll them back under the net.

   b. Continual Volley: Each boy vollies the ball in the air for as many times as he is able. The test begins by having the ball tossed above the head of each boy. A point is awarded for each successful volley.

c. Big Eye: A rectangular wooden frame (2' x 4') is placed out from the wall and supported by braces. Each boy has three consecutive opportunities, from a distance of fifteen feet, to shoot the ball through the "big eye." Two points are awarded for a successful shot while one point is given if a ball ricochets off of the frame. Two boys stand on either side of the frame to retrieve the balls while the others stand or sit well back of the shooter. The total points for each boy are to be recorded on the special evaluation sheet. In addition, other pertinent comments should be made wherever necessary.

Teaching Techniques:

As mentioned in the specific objective, this does represent a formal type of evaluation whereby each boy is hopefully performing up to his capacity with the full knowledge that the instructor is recording the results of his performance. It is believed that the point system might enhance the performance of the individual student in that he does have something for which he can strive. The format modifies portions of the original pre-test evaluation and should tend to re-establish the framework for the eventual post-test.

Comments: (after conducting the research class)

1. The "chu-chu train" was well received. They enjoy verbally imitating a train while doing the activity. The "wing flapper" did seem somewhat improved over the previous class hour.

2. The reaction to the evaluation was quite good although there definitely was not the excitement which was so evident during the "obstacle course" administered at the conclusion of Division I.

3. Although the volley test does not originally call for the student to use both hands, this change was made almost immediately when it became evident that certain boys would control the ball if allowed to use only one hand. This particular test also caused the most excitement of the three.

4. The service test went as well as could be expected. For many of these boys just the challenge to get the ball over the net three times in succession would have been sufficient.

5. The accuracy kicking involving the soccer ball did not progress as well as had been anticipated. It is highly indicative here that perhaps the time lapse between the completion of soccer skills and the administration of this test is significant.

6. It was not necessary for the instructor to have any assistance while administering the three test items.

H. Division III: Progressive Skills Involving Individual Stunts and Elementary Tumbling and Apparatus:

1. Introduction: The thirteen class hours making up this division were taught at the Fernald School from April 15 through May 20, 1966 with the exception of three days off for Easter Vacation (April 18, 20 and 22). The classes were taught at the Wrentham School from April 22, through May 20. An evaluation of those skills, in the form of an "obstacle course", was held during the thirteenth class hour.

2. Program Changes, Additions or Deletions: The chart below enumerates the specific changes, additions and deletions which were incorporated as a result of Jury recommendations, findings of the Pilot Study and conferences with the Doctoral Committee.

Division III:

Key To Changes: Suggested By: J = Jury, C = Doctoral Committee, P = Pilot Study

Class I:
No changes.

Class II:
The "chicken walk and the "frog leap", both individual stunts, replaced the more difficult "rabbit hop" and "elaphant walk," a doubles stunt. (P)

Class III:
The "Three's Over and Under" were altered so that only two boys would be involved (Two's Over and Under). (J--P)

Class IV:
The "Three's Over and Under" were inserted as an optional skill activity as was "Add One" concerning the culminating activity. "Add One" as the name implies forces each boy to duplicate what has previously been done and then to add a new stunt. (J--P)

Class V:
The "Threes Over and Under" remained as optional. (J--P)

Class VI:
No changes.

Class VII:
No changes

Class VIII:
The "chest stand doubles balance" was deleted. (P)

Class IX:
Rope climbing skills were postponed until the following class hour. (C)
The "head stand" was again practiced so that more meaningful exposure could be insured. (P)
Sketch Cards were hung in "easy to see" locations to aid a boy in better understanding a particular apparatus skill. (J--C)

Class X:
The elementary rope climbing program was demonstrated and climbing the rope to a distance of eight feet was permitted. (C)

Class XI:
Limited swinging was allowed on the rope and swinging over an object (rolled mat) was inserted as an optional activity. (C)

Class XII:
The pull-up attempt was to begin with a bent-arm hang so that more success might be realized. (J)

Class XIII:
The name "skills course" was changed to "obstacle course" (C)
The squat stand was eliminated from the obstacle course due to difficulties encountered. (P)
The "seal crawl" was deleted from the obstacle course and replaced by the "dog-run" (all fours). (P)

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3. Outline of Daily Class Plans:
An outline of the thirteen daily class plans appears on the following page.

Day:	Objectives:	Specific Skills:	Culminating Activity:
1.	To introduce stunts relative to subsequent development of basic tumbling and apparatus skills.	Crab Walks, Dog Run, Lame Dog, Seal Crawl Heel Click, Heel Slap Jump-Turn ($\frac{1}{2}$), Mule Kick, Coffee Grinder	Skin The Snake Relay
2.	To continue participation in individual and/or couple stunt-type activities which modify basic skills relating to developmental tumbling and apparatus.	Enrichment** Chicken Walk Frog Leap Rocker Chinese Get-up	Animal Walk Parade
3.	To present selected skills basic to fundamental tumbling.	Enrichment Forward Roll Two's Over and Under	Follow The Leader
4.	To continue emphasis on class participation relating to fundamental tumbling skills.	Enrichment Backward Roll	Follow The Leader
5.	a.) To further develop basic tumbling skills. b.) To introduce fundamental balancing skills.	Enrichment Squat Stand Squat Balance	Follow The Leader
6.	To present tumbling skills of a semi-intermediate level.	Enrichment Dive and Roll	Log Rolling Relay
7.	To continue presentation of fundamental tumbling and balancing skills which are increasingly more difficult.	Dive and Roll Doubles Balances Balance and Roll	Forward Roll Relay
8.	To cause the boys to become more proficient in individual and couple oriented skills.	Doubles Balances Dive and Roll Head Stand	Backward Roll Relay
9.	To cause the students to become familiar with fundamental skills involved with selected apparatus.	Beam walking forward backward and side. Bar, hang and drop, rail walk and leg raisers	Pyramid Building
10.	To continue presentation of skills basic to fundamental apparatus work.	Enrichment Beam, walk on all-fours Bar, rail hop and balance hang Climbing Rope, lying to sit, then to stand, hanging, footlock and climb	Pyramid Building
11.	To present somewhat more difficult skills fundamental to selected apparatus.	Beam, squat walk Bar, inverted hang Climbing Rope limited swinging	Follow The Leader
12.	To continue to promote individual development in selected fundamental apparatus skills.	Enrichment Bar, pull-ups	Follow The Leader
13.	To evaluate the students through a sequential course of events which involves selected fundamental skills.	Walk raised beam Dog Run, zig zag Dive and Roll Log Rolling Rope Swinging Jump and Turn Backward Roll and Crab Walk	Follow The Leader (optional)

**Enrichment denotes review

4. Presentation of Daily Class Plans: Each class plan is presented on the pages that follow. Comments relative to their effectiveness and recommendations for further changes or revision are included.

Skill-Oriented Program
Division III: Class I:

Class Organization: (and specific formations)
1. Roll call and personal inspection (line)
2. Warm-up activities (open)
3. Instructional class
    Skills a. (squad), b. (semi-circle) (22-28 min.)
    Culminating activity (relay) (4-6 min.)
4. Equipment and supplies
   (none necessary)

Time Allotment:
2--4 min.
4--6 min.
28-32 min.

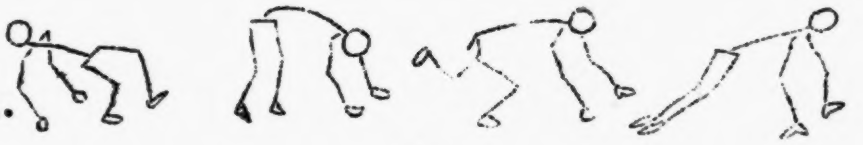
Warm-up Activity: (Instructor Leads)
1. Wing flapper (1-4 count)
2. Rope jumping mimetics (alter the pace)
3. Windmill sitting down (have them grab their toes)
4. Lift 'em and spread 'em (pat stomachs lightly)
5. Chu-chu train (verbal)

Instructional Class:

1. **Objective:**
   To introduce stunts relative to subsequent development of basic tumbling and apparatus skills.

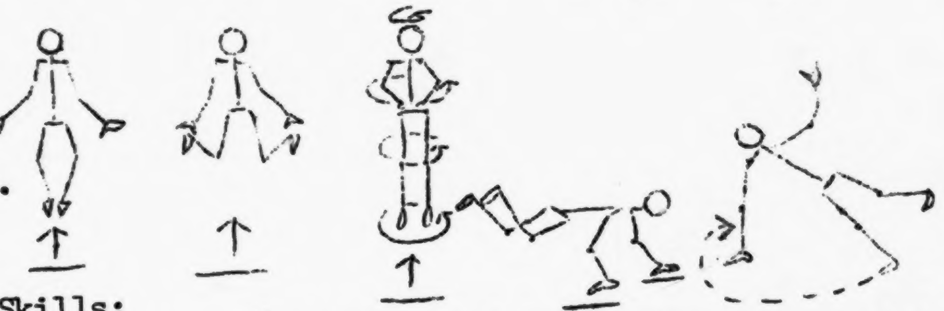
2. **Explanation-Demonstration:**
   a. Animal Walks
      front and back crab
      dog run
      lame dog run
      seal crawl

a.



   b. Individual Stunts
      heel click
      heel slap
      jump and turn ($\frac{1}{2}$)
      mule kick
      coffee grinder

b.



3. **Participation-Practice of Skills:**
   a. Animal Walks: Form two squads. The initial drill has each of the groups practicing the animal walks as they are called out by the instructor. The boys are told not to begin a walk until the boy in front of him is across the tape line (10 feet from starting line). The drill continues. (1/2 available time)

   b. Individual Stunts: Forming semi-circles, each groups works on the individual stunts as they are called out by the instructor. (1/2 available time)

4. **Culminating Activity:**
   Skin The Snake Relay: Form two relay groups. With the boys in a stride position each bends forward and reaches the right hand between the legs and joins it with the left hand of the boy behind. To begin the relay the last boy in line lies down (will not drop hands) and the line passes over him with each succeeding boy following suit. When everyone is down (hands still joined), the process will reverse with the last boy getting up and moving slowly forward as the others follow.

Teaching Techniques:

This initial class hour, like the one to follow, is concerned with relatively simple stunts which do not require a great deal of proficiency and should allow the boys to experience success. Previous experience may have an effect here and to what extent this may or may not influence the attitude of the boy is not known.

The skill-drills are self-explanatory and the boys should be kept quite busy in both under the assumption that repetition will produce desirable outcomes. The culminating activity, although a competitive relay, will probably turn out to be just plain "fun" for each group.

Tumbling mats are not called for but can be used if the instructor thinks they should be.

Comments: (after conducting the research class)

1. Warm-up: They enjoy grabbing their toes in the "windmill sitting down" and although this is more time consuming, the innovation is recommended.

2. Animal Walks: The boys certainly had no objection to the "animal walks" being called same and most of them enjoyed mimicking the various sounds.

3. Animal Walks: As it had been predicted earlier, the "animal walks" did take preference over the individual studnts both in terms of interest and student participation. Also the formation utilized for the walks was more advantageous in being able to keep them busy.

4. Culminating Activity: No specific difficulties arose other than during the "Skin the Snake Relay" other than the fact that two boys, both members of the same group, simply could not comprehend what had to be done. Despite this the activity is termed as successful and was a great deal of fun for the boys.

Skill-Oriented Program
Division III: Class II:

Class Organization: (and specific formations)		Time Allotment:
1. Roll call and personal inspection (line)		2--4 min.
2. Warm-up activities (open)		4--6 min.
3. Instructional class		28-32 min.
Skills a. (squad), b. (semi-circle)	(22-28 min.)	
Culminating activity (squad)	(4-6 min.)	
4. Equipment and supplies (none necessary)		

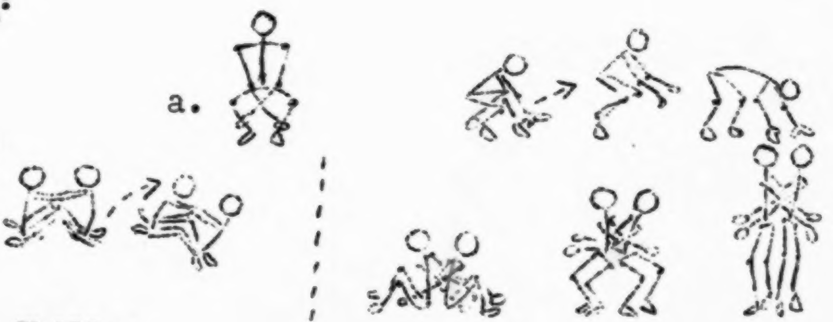
Warm-up Activity: (Instructor Leads)

1. Wing flapper
2. Touch toes (hands from hips)
3. Rope jumping mimetics
4. Windmill sitting down
5. Chu-chu train

Instructional Class:

1. Objective:
   To continue participation in individual and/or couple stunt-type activities which modify basic skills relating to developmental tumbling and apparatus.

2. Explanation-Demonstration:
   a. Animal Walks
      chicken walk
      frog leap
   b. Couple stunts (doubles)
      rocker
      chinese get-up



3. Participation-Practice of Skills:
   a. Animal Walks: The initial activity consists of the same repetition-type drill concerning the animal walks as described in the previous lesson plan. The chicken walk and the frog leap will be added to those already demonstrated. (1/2 available time)

   b. Individual and Couple Stunts: Two highly motivating doubles stunts (see explanation-demonstration) are demonstrated to go along with the individual stunts of the previous day. Again, with each group in a semi-circle, the instructor directs a continual practice session dealing with the seven individual stunts. (1/2 available time)

4. Culminating Activity:
   Follow The Leader-Animal Walk Parade: Form two or three squads. The boys in each of the groups have approximately one minute in which to lead their mates utilizing one or several of the animal walks.

Teaching Techniques:

As stated previously it is believed that the animal walks and the stunts will motivate the boys to do their very best. Mimicry, where applicable, should be allowed despite the formal classroom atmosphere as such must be considered a very normal reaction.

It would seem quite practical to re-demonstrate those walks and stunts from the previous class hour so that the conception of "how" can be reinforced. Despite the fact that each of these can be performed without benefit of a tumbling mat, it remains optional whether or not to require their use.

Both of the drill-type activities lend themselves extremely well to individual instruction. In most cases it would seem that the instructor could actually perform the stunt or walk right along with the student thus giving him a first-hand example to follow.

Comments: (after conducting the research class)

1. Warm-up: The only warm-up activity which really caused any difficulty was the "wing flapper". There was definite carryover noticable concerning "touch toes" which was included again after being introduced originally during the first division.

2. Animal Walks: The interest was again very high. The "dog run" and "lame dog run" definitely reigned as favorites while the "seal crawl" clearly was the most difficult.

3. Stunts: It was not easy for many of these boys to succeed at the "Chinese get-up" and the "coffee grinder" appeared to be the most difficult in that they did not clearly understand what was expected of them.

4. Culminating Activity: "Follow the Leader" was highly successful and at least seventy per cent of the boys were given the opportunity to lead at both schools.

Skill-Oriented Program
Division III: Class III:

Class Organization: (and specific formations)	**Time Allotment:**
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Instructional class	28-32 min.
Skills a. (squad), b. (squad), c. (couple)	(22-28 min.)
Culminating activity (pepper)	(4-6 min.)
4. Equipment and supplies	
a. 6-8 tumbling mats (5' x 10' x 2")	

Warm-up Activity: (Instructor Leads)

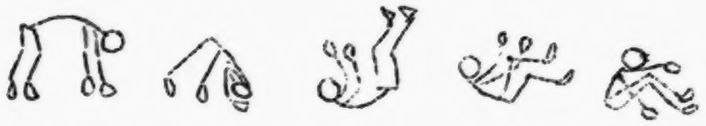
1. Wing flapper
2. Touch toes
3. Windmill sitting down
4. Bicycle and kickover (take some time and press them to do both)
5. Chu-chu train

Instructional Class:

1. **Objective:**
   To present selected skills basic to fundamental tumbling

2. **Explanation-Demonstration:**
   a. Enrichment of previous skills
   b. Forward roll (from squat to semi-stand as soon as possible)
   c. Twos over and under

b.



3. **Participation-Practice of Skills:**
   a. Stunts and Walks: Form two squads. Combining the individual and couple stunts and the animal walks the instructor verbally calls each one of them off (especially those that are most difficult) and the groups perform accordingly. In the case of the stunts, the boys remain in stationary positions while they move consecutively during the animal walks. (1/3 available time)

   b. Forward Roll: The forward roll from a squat approach is introduced and the boys from each of the two groups work across a row of tumbling mats. Initially boys are on their own; however, if necessary they can be paired off for purposes of spotting and/or steering. (1/3 available time)

   c. Coordinated Rolling and Jumping: Utilizing two strings of mats, the boys quickly form into pairs and practice the "Twos Over and Under." If possible each pair of boys should have a mat. (1/3 available time)

4. **Culminating Activity:**
   Form two or three pepper groups. The leader faces his group. He performs and they, as a group, follow his lead. Each boy is allowed approximately one minute. Stunts not specifically demonstrated earlier should not be discouraged or stifled if they are practical. Such action indicates self-expression.

Teaching Techniques:

The tempo changes considerably following the initial activity. Teaching the forward roll across the mat and from a squat approach should lend itself well to more apparent achievement in the eyes of most boys. Time does not permit further instruction and the major emphasis should be placed on getting over successfully with the chin and knees tucked and a slight push coming from the arms.

The "twos over and under", once it has been learned, represents a highly motivating activity; however, it must be grasped initially if any real success is to be forthcoming. To jump when rolled against and to roll with the knees down are the two primary skills which must be stressed.

The culminating activity allows opportunity for further development concerning the individual stunts.

Comments: (after conducting the research class)

1. Warm-up: In the "bicycle" there was some improvement apparent in the ability of the boys to finally get their hands and elbows propped successfully under the hips. The "kickover" portion of the activity was still more successful as they enjoy contacting the floor with their toes.

2. Walks and Stunts: The "animal walks" and "individual stunts" called out by the instructor were seemingly more efficiently performed than during the previous class hour.

3. Forward Roll: A number of older boys in the groups who obviously were less-skilled than some of the younger ones balked at attempting the forward roll. For the most part, however, the boys seemed to enjoy learning and/or attempting to succeed.

4. Two's Over and Under: This activity represented somewhat of a diversion. Most of the boys achieved this after a fashion. The most apparent difficulty was their remembering when they should roll and when they should jump. There was also a problem with high knees.

5. Culminating Activity: "Follow the Leader" involving individual stunts was not as successful as the previous one involving the animal walks. There is more pressure on the leader to hold the interest of the group when the pepper formation is being utilized.

Skill-Oriented Program
Division III: Class IV:

Class Organization: (and specific formations)	Time Allotment:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Instructional class	28-32 min.
Skills a.(squad), b.(couples), c.(squad)	(22-28 min.)
Culminating activity (squad or pepper)	(4-6 min.)
4. Equipment and supplies a. 6-8 tumbling mates (5' x 10' x 2")	

Warm-up Activity: (Instructor Leads)

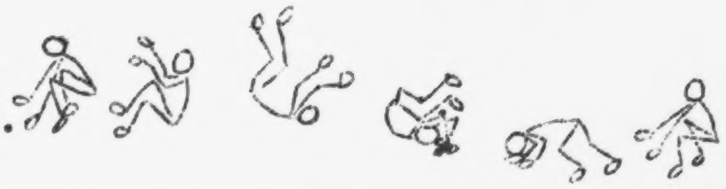
1. Touch toes
2. Kneebends (1-2 count with arms straight out)
3. Windmill sitting down
4. Bicycle and kickover (should contact floor at least twenty times)
5. Chu-chu train

Instructional Class:

1. Objective:
   To continue emphasis on class participation relating to fundamental tumbling skills.

2. Explanation-Demonstration:
   a. Enrichment of previous skills
   b. Backward roll (from squat approach)

b.



3. Participation-Practice of Skills:
   a. Forward Roll: Form two squads. Utilizing two strings of mats, the practice session concerning the forward roll is handled in the same manner as the previous class hour. Those boys who in the opinion of the instructor are ready to roll from a standing position should be allowed to do so. The across-mat procedure is still followed unless there are boys who wish to try rolling consecutively. (1/3 available time)

   b. Coordinated Jumping and Rolling: The "twos over and under" activity is to be held again. For those who handle it well, the "threes over and under" can be substituted. (1/3 available time)

   c. Backward Roll: Utilizing the same equipment members of each groups practice the backward roll across the mats. More care should be taken to insure a proper interval between boys and spotting should be provided where necessary. (1/3 available time)

4. Culminating Activity:
   Follow The Leader: Form two or three squads (or pepper). Each boy is given an opportunity to lead his group in any skill thus far introduced with the exception of the backward roll.

Teaching Techniques:

Confined practice concerning the forward roll should continue unless the level of the class is such to warrant doing otherwise. It is not believed, unless previous experience has been considerable, that these boys would be ready for the continual roll.

The "two's over and under" will again be practiced. Efforts should be made to convert as many boys as possible to the "threes over and under" which is somewhat more difficult to perform. The common faults to watch for in either are high knees, the ability to jump over another boy, and the knowledge of when to jump and when to roll.

The backward roll, for many, may be one of the most difficult skills attempted. The fear of rolling backwards without being able to see is very real and should not be underestimated. The instructor would do well to actually roll those boys over slowly that are reluctant to attempt it on their own. The conventional method of the tucked chin, with the "fall back and push" command should be utilized.

It ought to be interesting to view the students in "Follow the Leader", to see whether they duplicate others or attempt to perform those skills not done by others.

("Add One" as an activity is optional and may be used if the group is capable of grasping the concept. Specifically each boy is expected to duplicate the previous leader and then add a new one of his own.)

Comments: (after conducting the research class)

1. Forward Roll: It is significant that approximately one-third of the boys attempted and generally succeeded at rolling consecutively.

2. Two's Over and Under: Several boys were able to go on to the more difficult "three over and under". In most instances these were students who might be classed as better thinkers.

3. Backward Roll: This roll was difficult and several of the boys had to be urged to even attempt it. Much helpful spotting and back patting is recommended to aid in putting this one over.

4. Culminating Activity: "Add One" was not particularly successful as an optional activity and it was decided that the time allowed was not sufficient for the necessary interaction that should take place. Also, effective discipline was more difficult to maintain.

Skill-Oriented Program
Division III: Class V:

Class Organization: (and specific formations)	Time Allotment:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Instructional class	28-32 min.
Skills a. (squad), b. (couple), c. (squad)	(22-28 min.)
Culminating activity (squad or pepper)	(4-6 min.)
4. Equipment and supplies	
a. 6-8 tumbling mats (5' x 10' x 2")	

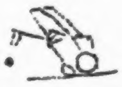
Warm-up Activity: (Instructor Leads)

1. Touch toes
2. Kneebends
3. Windmill sitting down
4. Bicycle and kickover
5. Situps (Test-fashion with partner holding ankles)

Instructional Class:

1. Objectives:
   a. To further develop basic tumbling skills
   b. To introduce fundamental balancing skills

2. Explanation-Demonstration:
   a. Squat stand
   b. Squat balance

a.

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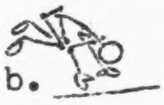


3. Participation-Practice of Skills:

   a. Backward Roll: Form two squads utilizing two strings of mats. The practice-drill session dealing with the backward roll is continued. Consecutive rollings should be allowed for those who are ready. (1/4 available time)

   b. Coordinated Jumping and Rolling: The "twos over and under" activity is to be utilized for the third consecutive class hour and it is expected that the boys should be able to achieve success in this multiple-type maneuver. The alternate system of working with three boys, should again be substituted if ability permits. (1/4 available time)

   c. Elementary Balancing: The squat stand and balance are introduced to the groups and the boys will utilize the two strings of mats in the manner which has been prevalent throughout. A drill-type approach should be inserted toward the completion of the period to aid in determining how many are able to achieve one or both of these skills. (1/2 available time)

4. Culminating Activity:
   Follow The Leader: This will be handled in the same manner as the previous class hour with the exception that there will be no restrictions placed upon the leader. Each leader must decide for himself whether the group will remain stationary or move around. ("Add One"still remains optional.)

Teaching Techniques:

An all-out effort should be launched to give constructive assistance to any boy who is still experiencing serious difficulty with the skills involved in the "twos and/or threes, over and under." It is hoped that the larger majority of boys will be able to grasp and thus enjoy this type of activity.

The backward roll in its second day will, no doubt, remain quite difficult for some and to have a boy coming over on his side rather than the back should not be an unexpected incident. A student wanting to attempt the roll from a semi-crouch position should do so only if his performance in the more elementary squat technique has been highly satisfactory. By the same token, consecutive rolling can be permitted for those who are ready.

In introducing two varieties of the squat balance at the same time, it is expected that one will compliment the other. This is to suggest that some boys may find it easier to achieve the squat balance from the stand and vice-versa. The drill procedure of having everyone attempt the skill on a signal from the instructor should be used in each of the three practice activities.

Comments: (after conducting the research class)

1. Warm-up: The boys were far more enthused about doing the regular "sit-ups" as opposed to the modified version (arms outstretched above head) which had been introduced earlier in the program.

2. Backward Roll: The improvement in this drill was not that noticable and the skills involved obviously would take more time to master than is presently allowed. The important thing was that approximately forty per cent of them did achieve wholly or partially while the majority were willing to work at it.

3. Squat Stand: The "squat stand" was difficult as it was not easy for them to understand the mechanics involved. For instance, so many of them wanted to attempt this skill with their arms outside of the knees. Much individual instruction is necessary if they are to grasp the concept.

4. Culminating Activity: "Follow The Leader" has generally been effective. It afforded opportunity to several boys who ordinarily did not perform well to try their hand at leading others. Some very gratifying results were evidenced. This type of activity, especially utilizing the squad or line formation, is highly recommended.

Skill-Oriented Program
Division III: Class VI:

Class Organization: (and specific formations)	Time Allotment:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Instructional class	28-32 min.
Skills a. (squad), b. (squad), c. (single line)	(22-28 min.)
Culminating activity (relay)	
4. Equipment and supplies	
a. 6-8 tumbling mats (5' x 10' x 2")	

Warm-up Activity: (Instructor Leads)

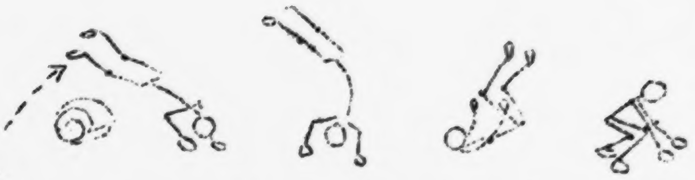
1. Touch toes
2. Kneebends
3. Bicycle and kickover
4. Sit-ups (from 10 to 12)
5. Straight-leg-stretcher (using same partner have him stand back of other boy to see if pusher can grab his hands)

Instructional Class:

1. Objective:
   To present tumbling skills of a semi-intermediate level.

2. Explanation-Demonstration:
   - a. Enrichment of previous skills
   - b. Dive and roll

b.



3. Participation-Practice of Skills:
   - a. Front and Back Rolls: Both the forward roll and the backward roll are to be practiced on the following basis: The boys in each group that wish to roll across the mats (single roll) will do so and then be followed by those who wish to attempt more than one roll down the mats. This procedure is to be followed for both types of rolls on a continuous drill-type basis. (1/3 available time)

   - b. Squat Stand and Balance: The same procedures of the previous class hour are followed concerning the squat stand and the squat balance. The boys should be urged to work most on the one that is more difficult. The "everybody up" command should again be employed to ascertain both problems and progress. (1/3 available time)

   - c. Dive and Roll: The dive and roll is to be carefully demonstrated utilizing a tightly rolled mat which is placed between the ends of two other mats (5' x 10'). An additional mat will then be placed on the forward side of the roll to give a four inch landing cushion. Each boy, with the direct aid of the instructor, attempts to successfully roll following a dive over the rolled mat. The drill continues with all boys in one line unless another competent assistant is available. (1/3 available time)

4. Culminating Activity:
   Log Rolling Relay: Form three relay groups. Each group faces a "mat string" (2 mats). To begin, the first boy in each line rolls a distance of twenty feet and then rolls back to the next man in line who continues. The option to roll only one-way is permissible.

Teaching Techniques:

Short series of either the forward or backward roll should be permitted for those who are ready to attempt them. Caution must be taken here to insure that boys receive approximate equal time in utilizing the mats and the instructor may, if he wishes, redivide his groups so that the series can progress on one side and the singular rolls on the other. However, it is not intended to be implied here that these boys, as a class, should be ready for consecutive rolling.

The dive and roll, although much fun and highly motivating to the student, poses a problem for the instructor. Spotting must be provided and unless some reliable outside help is available the single line will have to be retained. Be certain that the boys are shown how to use a one-foot approach, tuck the chin and land on the hands as their body carries over. The rubber ball (drawn together) landing is highly recommended. Needless to say, individual attention is necessary.

Comments: (after conducting the research class)

1. Warm-up: It was thought that to have one boy stand slightly behind another to force that boy to push back and touch him would constitute an effective motivational device in the "straight-leg-stretcher." This was not entirely true as it was successful only with those boys who were concerned about doing well anyway.

2. Front and Back Rolls: These boys, like normal boys, like to attempt consecutive rolling (primarily forward). This too provides an additional motivational device which is effective.

3. Dive and Roll: The "dive and roll" was originally looked upon with mixed reaction. A number of the older boys were obviously worried about success and some of the younger ones seemed to fear it at first. The drill progressed steadily and speed was not urged. The result was that at least three in every four (many without a great deal of help) were at least getting over the rolled mat, and enjoying the activity very much.

4. Culminating Activity: The "Log Rolling Relay" offers a good diversion and certainly is one in which the boys can achieve more readily. The big problem for many is the inability to roll straight ahead. It is recommended that they be taught to raise the arms over the head and to roll with a so-called flat body.

Skill-Oriented Program
Divison III: Class VII:

Class Organization: (and specific formations)	Time Allotment:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Instructional class	28-32 min.
Skills: a. (single line), b. (squad), c. (squad)	(22-28 min.)
Culminating activity (relay)	(4-6 min.)
4. Equipment and supplies	
a. 6-8 tumbling mats (5' x 10' x 2")	

Warm-up Activity: (Instructor Leads)

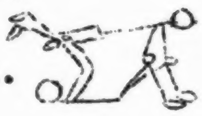
1. Head, shoulders, knees and toes
2. Kneebends
3. Bicycle and kickover
4. Sit-ups (from 12 to 15)
5. Straight-leg-stretchers (continue to use partners)

Instructional Class:

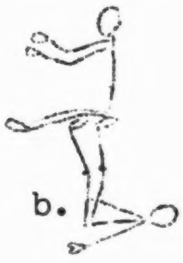
1. Objective:
   To continue presentation of fundamental tumbling and balancing skills which are increasingly more difficult.

2. Explanation-Demonstration:
   a. Horizontal stand (doubles balance)
   b. Sitting balance (double balance)
   c. Squat balance to forward roll

a.



b.



3. Participation-Practice of Skills:
   a. Dive and Roll: The procedures in practicing the dive and roll are the same as the previous class hour unless additional help is available so that two squads can be maintained. (1/3 available time)

   b. Balance and Roll: The squat stand and balance procedures of the previous two class hours are adopted for the "squat balance and forward roll" drill. Practice should ensue followed by several "everybody up, and over" commands from the instructor. Spotting is not recommended unless absolutely necessary. (1/3 available time)

   c. Doubles Balance: Form into squads (3 boys in each). Two boys attempt the doubles balance while the third acts as a spotter. The mats are placed in a broken circle so that the instructor can more easily watch the groups and give active assistance where it is needed.

4. Culminating Activity:
   Forward Roll Relay: Form two or three relay groups. The first boy in each line, from a squat or semi-stand position, rolls down the mat (number of times to be determined by instructor). He then runs to the turn-line and runs back to tag the next boy in line. The relay continues.

Teaching Techniques:

The squat balance to the forward roll is being introduced as a preparatory measure prior to attempting the head stand. The boy must be fully aware that he can land safely from an "upside down position" and both the squat balance and roll and the dive and roll technique should greatly aid in this respect. To demonstrate the "bringing the body together in a ball" effect is important and this should be shown carefully in both of the foregoing sequences. The fact that the arms are on the inside of the legs, prior to the roll, should not cause any serious difficulty and may even tend to benefit some of the boys.

The doubles balances are not expected to cause great difficulty and should offer a needed "change" for the boys. It is believed that best results will occur if the boys are matched according to size. Spotters should be used and brief demonstrations as to how one might best spot each balance are recommended.

Comments: (after conducting the research class)

1. Warm-up: Aside from the "straight-leg-stretchers" which improved very little from the previous class hour, the other activities were each performed in a satisfactory manner by a majority of the boys.

2. Double Balances: For some the "doubles balances" proved so easy that the novelty wore off quickly while for others they turned out to be more than a sufficient challenge.

3. Squat Stand: The "squat stand" and/or "balance" suffers primarily from the student's inability to interlock the elbows and knees. This concept is difficult for the educable mentally retarded boy but certainly would develop with enough practice as several did progress slightly during the span of three class hours. The squat stand to the forward roll was also difficult but those who did achieve the roll usually found a way to get through the two-part progression.

4. Dive and Roll: The progress noted at both schools was very encouraging to say the least. Spotting, by the instructor, is important.

5. Culminating Activity: The "Forward Roll Relay" was quite successful. The contest was conducted with a single roll preparatory to running. Earlier fears of too much emphasis on speed, while attempting the roll, were not justified here.

Skill-Oriented Program
Division III: Class VIII:

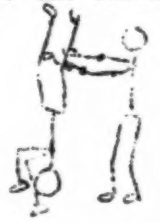
Class Organization: (and specific formations)	Time Allotment:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Instructional class	28-32 min.
Skills a. (squad), b. (couples), c. (single line)	(22-28 min.)
Culminating activity (relay)	(4-6 min.)
4. Equipment and supplies	
a. 6-8 tumbling mats (5' x 10' x 2")	

Warm-up Activity: (Instructor Leads)
1. Head, shoulders, knees and toes
2. Scramble (avoid going from feet to back)
3. Kneebends
4. Sit-ups (from 15 to 17)
5. Straight-leg-stretchers (partners are optional)

Instructional Class:

1. Objective:
   To cause the boys to become more proficient in individual and couple oriented skills.

2. Explanation-Demonstration:
   a. Enrichment of previous skills
   b. Head stand (conventional)



b.

3. Participation-Practice of Skills:
   a. Doubles Balance: The initial practice session again includes the five or six squads as they continue to work toward perfection of the doubles balance. (1/4 available time)

   b. Head Stand Balance: Utilizing the mats in the same broken circle pattern the head stand is to be practiced by the boys. To facilitate this they should be re-divided into pairs. A boy thus will be spotted for every attempt. (1/2 available time)

   c. Dive and Roll: The dive and roll drill is utilized for the third consecutive class hour and careful spotting must continue for every student. (1/4 available time)

4. Culminating Activity:
   Backward Roll Relay: Form two relay groups. The first boy in each line, beginning from a sitting squat position rolls over once in a backward roll. He then runs a distance of twenty feet to a taped line and returns to tag the next boy in line. The relay continues.

Teaching Techniques:

The conventional head stand (weight on hands), it is expected, will be quite difficult at the outset and for some little or no change is likely to occur. Spotting is very important and the instructor is urged to aid each boy having trouble, to hold him in position and show him how he can succeed. Success here could result from a very minimal performance.

It is not recommended that more than one rolled mat be allowed for the dive and roll and under no circumstances should a student be allowed to pose as a barrel! If success for a job well done in the dive and roll is well recognized, additional mats and/or barrels will not be necessary to bolster the ego and thus set up the possibility of injury to the neck area.

Comments: (after conducting the research class)

1. Warm-up: It was again noticable that in having two very popular activities back to back (head, shoulders, knees and toes and scramble) that the momentum seemingly carried over to aid in the performance of the others.

2. Double Balances: The "doubles balances" progressed reasonably well and are definitely recommended. This also presents an ideal situation for the instructor to utilize some of the more skillful boys as "helpers." Such action might also tend to eliminate potential discipline problems.

3. Head Stand: This proved to be somewhat of a frustrating experience for many. It was simply difficult for them and the spotting (so-called) by fellow students was not effective. Numerous boys expressed verbally their fear of this particular assignment. Perhaps if the "dive and roll" had preceeded the "head stand" the feeling of success would have been fresh in their minds and thus provided a better mental setting for this activity.

4. Dive and Roll: It seems well worth mentioning that very few requests were made for additional rolled mats. There was, without any doubt, a great deal of enjoyment in this activity and even those who really never grasped the skills involved did not balk a great deal when they knew that adequate spottine was available.

5. Culminating Activity: The "Backward Roll Relay" was successful due to spotting and/or assistance by the instructor for those who still could not get over by themselves.

6. General: The recommendation is made here that much emphasis be placed throughout the unit on how to properly fall.

Skill-Oriented Program
Division III: Class IX:

Class Organization: (and specific formations)		Time Allotment:
1. Roll call and personal inspection (line)		2--4 min.
2. Warm-up activities (open)		4--6 min.
3. Instructional class		28-32 min.
Skills a. (couples), b. (station)	(22-28 min.)	
Culminating activity (dispersed)		

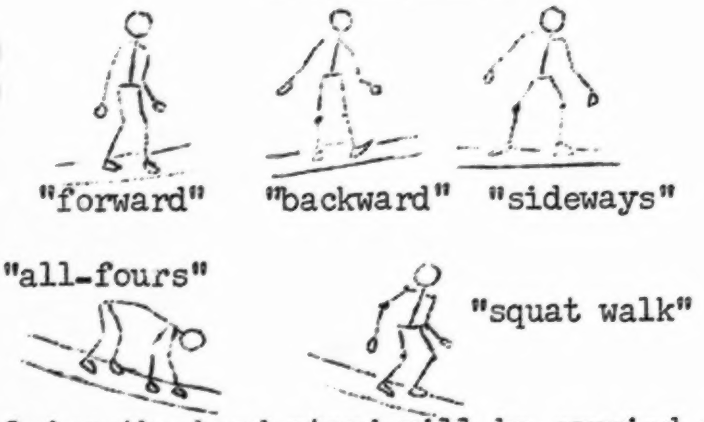
4. Equipment and supplies
   a. 6-8 tumbling mats (5' x 10' x 2")
   b. 2 balance beams and 4 stools
   c. at least one horizontal bar

Warm-up Activity: (Instructor Leads)
1. Head, shoulders, knees and toes
2. Scramble
3. Sit-ups (from 17 to 20)
4. Straight-leg-stretchers (partners are optional)
5. Squat thrusts (1-4 count)

Instructional Class:
1. Objective:
   To cause the students to become familiar with fundamental skills involving selected apparatus.

2. Explanation-Demonstration:
   a. Balance beam
      forward walk (elevated)
      backward walk (low and elevated)
      walk sideways on beam (elevated)
   b. Horizontal bar
      hang-drop
      rail walk
      leg raisers

"Beam Sketches"



3. Participation-Practice of Skills:
   a. Head Stand Balance: The drill involving the head stand will be carried on in the same manner as the previous class hour. (1/4 available time)

   b. Apparatus Skills: The station method of instruction is instituted whereby the instructor works with both groups at each station insofar as this is possible in the time allowed. Following the explanation-demonstration period the groups are assigned to the balance beam or the bar. They change apparatus upon a whistle signal from the instructor and should spend an equal amount of time at each station. (3/4 available time)

4. Culminating Activity:
   Pyramid Building: The instructor should aid the boys in building two simple pyramids. Orderly mount and dismount methods should be employed if possible, but this may prove to be difficult. The emphasis should be on "fun" and not on proficiency. (See below)

Teaching Techniques:

The skills on the two pieces of apparatus can be demonstrated initially and then shown again, if necessary, at each of the two stations. Adequate mats must be placed under the horizontal bar.

The purpose is to present from fifteen to seventeen very basic skills during this class hour and the three which follow. In doing this every attempt should be made to provide individual instruction where it is needed so that as much individual success as possible can be realized. The skills to be presented on three distinct pieces of apparatus are scheduled in a sequential manner and it is believed that each of them is within the grasp of this type of student.

It is recommended that slightly more time be allowed for the culminating activity in that some teaching and demonstration must occur.

Comments: (after conducting the research class)

1. Warm-up: Insistence by the instructor to do at least twenty "sit-ups" was met with mixed reaction. The boys who stop short generally require a greater degree of motivation or prodding.

2. Head Stand: These can be achieved but much more time is required for concentrated practice than was allowed in this study. Much work must go into how to properly spot one another. If this is not done, the instructor must, of necessity, render many boys a great deal of individual instruction.

3. Balance Beams: It was quite obvious that the boys had been exposed earlier to the beams. They did very well in the initial assignments.

4. Horizontal Bar: The enthusiasm was generally good concerning the "hang and drop." The "leg raisers" proved difficult for some and the "rail walk" bothered many as the hand movement seemed to frighten them somewhat. It also makes a difference if the bar is not adjusted to the proper height and/or reach of the individual boy.

5. Culminating Activity: Pyramids were well accepted by the boys and for the most part they clamoured to participate. It is difficult for those who may be classed as "slower thinkers" to comprehend their respective duties and they are very apt to simply quit in the middle of everything!

Skill-Oriented Program
Division III: Class X:

Class Organization: (and specific formations)		Time Allotment:
1. Roll call and personal inspection (line)		2--4 min.
2. Warm-up activities (open)		4--6 min.
3. Instructional class		28-32 min.
Skills (station throughout)	(22-28 min.)	
Culminating activity (squad)	(4-6 min.)	

4. Equipment and supplies
   - a. adequate mats for apparatus
   - b. at least one climbing rope
   - c. 2 balance beams and 4 stools
   - d. at least one horizontal bar

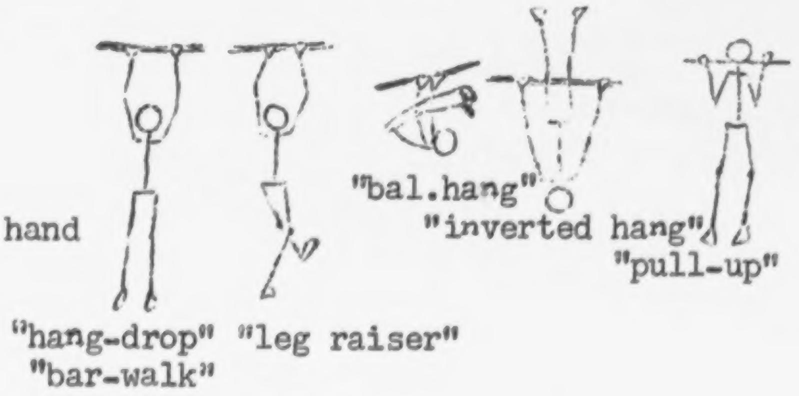
Warm-up Activity: (Instructoh Leads)
1. Head, shoulders, knees and toes
2. Scramble
3. Side straddle hop (1-2 count)
4. Straight-leg-stretchers (partners are optional)
5. Squat thrusts

Instructional Class:

1. Objective:
   To continue presentation of skills basic to fundamental apparatus work.

2. Explanation-Demonstration:
   - a. Enrichment of previous skills
   - b. Balance beam
     - add walking with all fours
   - c. Horizontal bar
     - add rail hop
     - add balance hand
   - d. Climbing rope
     - hand over hand, hand under hand
     - lying to sit, return
     - lying to stand, return
     - hanging and foot-lock
     - limited climbing

"Bar Sketches"



3. Participation-Practice of Skills:
   Utilizing three stations the above skills along with those demonstrated during the previous class hour are to be practiced by the boys. The instructor must "spot" at the bar for the balance hang.

4. Culminating Activity:
   Pyramid Building: Form two squads. Each group is asked to build either of the simple pyramids previously introduced. Following this, they are shown another simple pyramid which is sketched below. An audience is important in pyramid construction and if possible one group should watch the other one and give them some applause.

Teaching Techniques:

It will be of special interest to determine how anxious the boys are to return to apparatus work on the second day. The thinking is that they will be eager to repeat their performances and to learn more especially as the rope-climbing is introduced.

It is desirable that the boys continue to work steadily on the balance beam as the "all fours walk" coupled with the others should provide a good challenge. Concerning the rope the major emphasis will be on learning how to leave the floor with some degree of conficende. The bar activities present some concern and as it has already been mentioned, the instructor should be present for the "balance hang" attempts. Beneficial spotting could be such that each boy experiences some feeling of success even if he must be partially lifted to and from the balance hang position.

Again, it is recommended that slightly more time be allowed for the culminating activity.

Comments: (after conducting the research class)

1. Warm-up: The "side-straddle-hop" included for the third time in the warm-up progression presented very little problem for most of the boys. Once again, the carry-over of an earlier activity was quite evident.

2. Balance Beam: Again the performances here led the way insofar as greater individual success was concerned.

3. Horizontal Bar: The "balance hang" was very intriguing to the boys and most of them wanted to attempt it but only with adequate assistance from the instructor. Only a few tried it alone.

4. Climbing Rope: There was a definite element of uncertainty present concerning the majority of the boys insofar as climbing was concerned. It is not recommended now that the progression be shown in one class hour. Rather it is believed that to take one major point each day would be more effective in the long run.

5. General: It is significant that in utilizing three stations, the instructor is so busy at times maintaining order that he is unable to afford the necessary spotting and/or individual instruction which is so necessary. It is recommended that no more than two stations be used for classes of twelve or more students.

Skill-Oriented Program
Division III: Class XI:

Class Organization: (and specific formations)	Time Allotment:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Instructional class	28-32 min.
Skills (station throughout) (22-28 min.)	
Culminating Activity (squad) (4-6 min.)	

4. Equipment and supplies
   - a. adequate mats for apparatus
   - b. at least one climbing rope
   - c. 2 balance beams and 4 stools
   - d. at least one horizontal bar

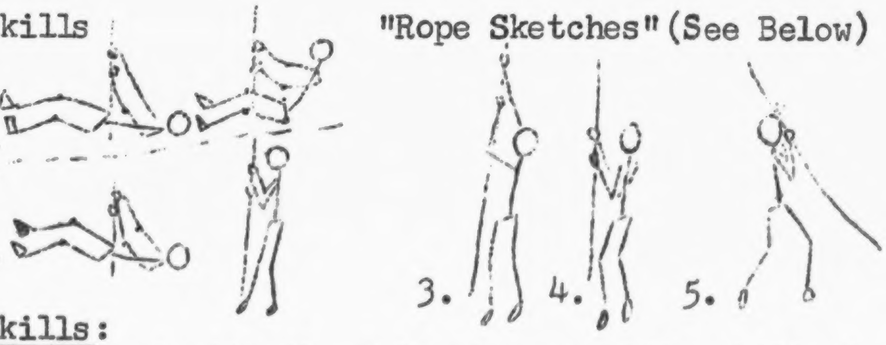
Warm-up Activity: (Instructor Leads)
1. Head, shoulders, knees and toes
2. Scramble
3. Side-straddle hop
4. Running in place (alter pace)
5. Squat thrusts

Instructional Class:

1. Objective:
   To present somewhat more difficult skills fundamental to selected apparatus.

2. Explanation-Demonstration
   - a. Enrichment of previous skills
   - b. Balance beam
     - squat walk
   - c. Horizontal bar
     - inverted hang balance
   - d. Climbing rope*
     - limited swinging

"Rope Sketches" (See Below)



3. Participation-Practice of Skills:
   The station method is again utilized with the following specific skills being attempted at each as time and ability permit.

Balance Beam	Bar (Ladder)	Climbing Rope
1. walk forward	1. hang and drop	1. lying to sit and return
2. walk backward	2. bar walk	2. lying to stand and return
3. walk sideways	3. leg raisers	3. hanging
4. all-fours walk	4. bar hop	4. climbing (hand over hand with foot-lock)
5. squat walk	5. balance hang	
	6. inverted hang	5. limited swinging

Rope climbing is limited to eight feet (should be marked with tape). Short span swinging on the rope can be attempted by the boys under the direction of the instructor. The balance and/or inverted hang from the bar should not be attempted at all except when the instructor is present to assist!

4. Culminating Activity:
   Follow The Leader: Each boy, within a group, is given the opportunity to lead the others utilizing any of the skills that have been introduced. Because of time limitations, slightly more than a minute can be alloted for each boy.

* Swinging over an object will be used only if climbing proves to be too difficult or not practical.

Teaching Techniques:

This should be considered a very pivotal day both in terms of individual development and continued interest. Caution must be taken to insure that boys do not take "daring liberties" on the apparatus and thus the formal type class atmosphere should definitely be maintained.

Again, it is important that specific assistance be given especially for the bar and rope activities. Hopefully, the majority of the class will be able to climb the rope; however, none should be allowed above the eight foot mark. A boy who simply cannot achieve in climbing should be put back to work on the lead-up skills and encouraged to succeed at these.

The insertion of "Follow The Leader", as a culminating activity should prove interesting to both the boys and the instructor, but for different reasons. The boy is given an opportunity to exhibit his "best" and the instructor can ascertain the progress that has been made.

Comments: (after conducting the research class)

1. Balance Beam: These activities again progressed reasonably well. However, in employing the "station" method, many of the boys were satisfied to perform the easier skills as the instructor was not able to give them enough attention.

2. Horizontal Bar: Contrary to the "not wanting to" attitude concerning the rope, most of the boys clamored to perform the "balance hang" and the "inverted hang". Both of these represented a novel experience and only time would indicate whether or not a true interest existed. Much spotting was necessary on these activities and this in itself represented a limitation.

3. Climbing Rope: It was quite evident that the majority of these boys would rather swing on the rope than attempt to climb it. For them this seemingly represented too difficult a task. This was not true; however, if the instructor was willing and able to stand right under the boy and give him a helpful "boost".

4. Culminating Activity: "Follow The Leader" was deemed highly successful. Skills on the balance beam were the most often chosen items; however, swinging on the rope and a number of tumbling activities (i.e. animal walks and the forward roll) were selected by several of the boys.

Skill-Oriented Program
Division III: Class XII:

Class Organization: (and specific formations)		Time Allotment:
1. Roll call and personal inspection (line)		2--4 min.
2. Warm-up activities (open)		4--6 min.
3. Instructional class		28-32 min.
Skills (station throughout)	(22-28 min.)	
Culminating activity (squad)	(4-6 min.)	

4. Equipment and supplies
   a. adequate mats for apparatus
   b. at least one climbing rope
   c. 2 balance beams and 4 stools
   d. at least one horizontal bar

Warm-up Activity: (Instructor Leads)
1. Scramble
2. Windmill (1-4 count, be explicit in directions)
3. Side-straddle hop
4. Running in place
5. Squat thrust

Instructional Class:
1. Objective:
   To continue to promote individual development in selected fundamental apparatus skills

2. Explanation-Demonstration:
   a. Balance Beam
      enrichment of previous skills
   b. Bar (ladder)
      add pull-ups (overhand grasp, begin with bent arm hang)
   c. Climbing Rope
      enrichment of previous skills

3. Participation-Practice of Skills:
   The station method is again adhered to in the same form and manner as previously described. Limitations relating to the bar and rope are also continued. Each boy should receive an opportunity to take his turn attempting pull-ups.

4. Culminating Activity:
   Follow The Leader: This activity is carried on in the same manner as the previous class hour.

Teaching Techniques:

This is the final class hour devoted to apparatus and if one scrutinizes the skills which were introduced he will probably agree that they involved basic climbing, pulling or holding the body up via the arms, swinging from a stationary and moving object and becoming better able to handle the body in terms of balance. This then was the primary motive and obviously many more class hours would have to be scheduled and numerous other skills introduced if any type of highly proficient and/or specialized development in apparatus were to occur.

Comments: (after conducting the research class)
1. General: In a culminating statement it can be said, based on this experimental study, that rope climbing did not progress well unless plenty of help was on hand. They did, however, like to swing on the rope and especially over an object. Such might suggest the addition of a Swedish Box so that combination work could be undertaken. On the other hand the performances on the horizontal bar and the balance beams would have to be rated as successful by comparison. Upper arm strength was a factor; however, and the lack of same contributed to the failures on the rope and to the poorer performances concerning the "rail hop" and the "rail walk".

Skill-Oriented Program
Division III: Class XIII:

Class Organization: (and specific formations)	Time Allotment:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Instructional class	28-32 min.
Skills (obstacle course)	
Culminating activity (squad)	

4. Equipment and supplies
    - a. 8 tumbling mats (5' x 10' x 2")
    - b. 1 balance beam (elevated)
    - c. 6 folding chairs or cones
    - d. 1 climbing rope

Warm-up Activity: (Instructor Leads)

1. Arm circles (start small, to large and return)
2. Side-straddle hop
3. Windmill
4. Running in place
5. Squat thrusts

Instructional Class:

1. Objective:
   To evaluate the students through a sequential course of events which involves selected fundamental skills.

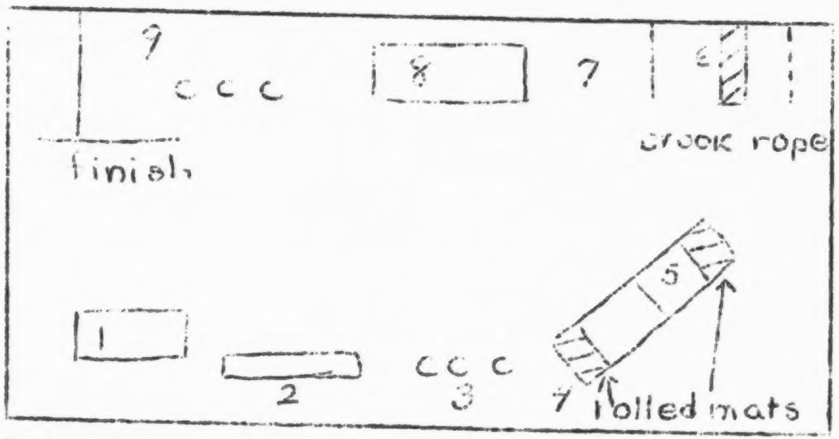
2. Explanation-Demonstration:
   The "obstacle course" includes the following
   - a. Forward roll (1)
   - b. Walk forward on elevated balance beam (2)
   - c. Dog run (zig-zag) through three cones or chairs (3)
   - d. Dive and roll over the fence (rolled mat) (4)
   - e. Log rolling (rolling on mat) (5)
   - f. Swing over the brook (short rope swing over a rolled mat) (6)
   - g. Jump and turn ($\frac{1}{2}$) (7)
   - h. Backward roll (8)
   - i. Crab walk (forward) to finish line (9)

3. Participation-Practice of Skills:
   The instructor should go through the obstacle course slowly, explaining each step as he progresses. Following a question and answer period he should run through the course a second time.

   The boys, one at a time, then attempt to complete the course. Following this, the instructor goes over the mistakes that were made (not by name) and provides further demonstration if this appears to be necessary. The boys then are told that they are to run through the course performing as well and as quickly as possible. The instructor must be prepared to lead a boy through the course who may experience difficulty. In this regard the route, especially through the chairs, should be marked (arrows) on the floor.

   The special evaluation form is to be completed concerning performances and the total time taken for the students to complete the course should be recorded.

   If time permits, following the second running, boys are to form into squads for "Follow The Leader". (See previous culminating activity)



Teaching Techniques:

The regular teacher of physical education should be asked to assist during this class hour and it is recommended that he spot for the dive and roll (dive over the fence). It is expected that each boy should be able to go through this "obstacle course" and experience some degree of success. This is to suggest that even if a boy should falter concerning two or three obstacles he may still handle the others satisfactorily.

In completing the evaluation form the same type of thinking should prevail that has been prevalent in the past. The individual "times" can be announced. (Each time a boy misses an obstacle a check worth three additional seconds is recorded.) Student reaction to this "obstacle course" and to the one held during the 13th class hour should be closely compared.

Comments: (after conducting the research class)

1. Obstacle Course: Individual and group reaction to the obstacle course was excellent. Almost every boy seemingly gave his utmost both in terms of "know-how" and "speed". The competition was keen and the system of "checks" was a source of genuine concern to most of them. It was almost amazing how well many of the boys achieved the "dive and roll". The "backward roll" was without a doubt the most difficult skill sequence presented. The competitive element (time and checks) definitely was a factor and the results were generally gratifying.

2. Obstacle Course: A course such as this is highly recommended for use with this type of boy; however, basic instruction in the skills involved constitutes a very essential pre-requisite. This was proven very true when the same course was administered to the boys in the Play-Oriented and Free-Play Programs.

CHAPTER V:

PLAY-ORIENTED PHYSICAL EDUCATION PROGRAM

A. Introduction:

This program was developed on the premise that more could be gained by the educable mentally retarded boy if major emphasis was placed on play-type activity which would encompass various developmental skills and/or fundamentals. The less formal and somewhat more permissive attitude involved with play-type activity, it was thought, would render the boy more confidence. The objectives of physical education, therefore, would be more easily obtainable and the boys would experience a more effective means of personally adapting to activities relative to fundamental motor development.

B. Aim:

The aim was to assist each boy in the realization of optimum development, through learning experiences which emphasized play-type activity and to enable him to gain greater appreciation concerning the physical, social and emotional aspects of such activity.

C. Objectives:

The objectives were:

1. To establish an adequate rapport between teacher and student.
2. To establish basic guidelines which were to be followed while in the locker room and/or gymnasium.
3. To define and demonstrate certain organizational procedures.
4. To teach with an awareness that:
    a. Abilities and attention spans among the boys may differ markedly.
    b. Activities must offer opportunity for personal development and self-expression.
    c. A semi-formal classroom atmosphere should prevail.
    d. Familiar activities and/or formations should be beneficial.
    e. Concrete proposals rather than abstract ones are likely to be grasped more quickly.
    f. Variety in technique and method is thought to be advisable.
    g. Individual differences among the boys should be considered.
    h. Carefully demonstrated techniques and learning through play are significant.
    i. Problems of discipline will occur and should be handled diplomatically and without threat.
    j. Praise, rather than reproof appears to be advisable.
    k. Enjoyment through play-type activity should motivate the students.
    l. Repetition of certain play-type activities appears to be necessary for purposes of retention.
5. To encourage participation in the play-type activities.
6. To recognize success.
7. To contribute whenever possible to the aim of this program.

D. Structure:

1. Each class hour was informal during the participation phase.

2. Fundamentals necessary to playing and/or eventual achievement in the play-type activities presented were explained and demonstration, by the instructor, but not practiced prior to participation. Specifically this meant that the boys would not practice any of the basic fundamentals demonstrated and explained by the instructor. Any indirect or direct exposure to same came through particiaption in the play-type activities.
3. The following limitations were observed in terms of time allotments during the organizational and participation phase of the class hour.
    a. Roll call and personal inspection---------- 2--4 minutes
    b. Warm-up Activities------------------------- 4--6 minutes
    c. Participation Phase------------------------ 28-32 minutes
        (1) Explanation-demonstration (4--6 min.)
        (2) Organized play-type activities (22-28 min.)
4. The class content, play-oriented in nature, was presented in three divisions which were:
    a. Games and play-type activities of low organization which include fundamentals basic to motor development.
    b. Related play-type activities and modified games based on fundamentals of soccer and volleyball.
    c. Play-type activities based on various fundamental stunts, tumbling and apparatus.

E. Class Organization:

The Play-Oriented Physical Education Program was similar to the Skill-Oriented Program in that the line formation was utilized for the taking of roll and personal inspection. Each boy was assigned a roll number and was expected to remember it, but emphasis was not placed on a formal-type roll call! Numbers were drawn from a box "draw box" to see which boys would form the front row for purposes of warm-up activity. At the completion of the warm-up activities, which following the eighth class hour saw at least one and most of the time two students assisting the instructor, the class members formed a circle and sat down so that explanation and demonstration could be forthcoming. Immediately following this the instructor explained the initial play-type activity and the boys then participated in same with a semi-formal atmosphere prevailing. The play-type activities continued throughout the remainder of the class hour with the emphasis on individual and group enjoyment, participation and realization of at least limited success.

F. Division I: Games and Play-Type Activities of Low Organization Which Include Fundamentals Basic to Motor Development:

1. Introduction: The initial class hour was taught at both schools on January 31, 1966, prior to the pre-tests which were administered on February 2, 4, and 7. This thirteen class hour division (I) was completed with an evaluation (obstacle course) on March 14, 1966.

2. Program Changes, Additions and Deletions: The material on the following page enumerates the specific, changes, additions and deletions which were made following correspondence with the Jury, completion of the Pilot Study and final conferences with the Doctoral Committee. These revisions are incorporated into the class plans which appear in this division.

Play-Oriented Physical Education Program
Division I:

Changes, Additions and Deletions: Recommended By: J=Jury, C=Doctoral Committee and P=Pilot Study.

Class I:

It was emphasized that the "Tight Rope Relay" was to be considered a competitive activity. (J)

Class II:

The "Beam Walk Relay" was added. It was determined earlier that this type of student would not encounter serious difficulty with this particular type of activity. (P)

Class III:

The "Beam Walk Relay" was added to the existing play-type activities. (P)
The names of professional teams were to be substituted for "home and visitors" in the "Strike and Chase" activity. (P)

Class IV:

It was emphasized that "Circle Weave" was to be a competitive activity. (J)

Class V:

"Cowboys and Indians" was the new name given to the activity formerly called "Crows and Cranes".(P)
The "Walk-Run and Skip Circle Weave Relay" was divided into three separate contests rather than having the boys attempt to run through each of the three in a consecutive manner. (J--P)

Class VI:

No change other than the "Cowboys and Indians".

Class VII:

"Snatching Sticks" was eliminated as a play-type activity due to the difficulty in understanding the rules. (P)
The "running broad jump" was replaced by the "standing broad jump". (J--P)
"Jump The Shot" was added as a play-type activity and how to jump over a moving object was added to the explanation-demonstration. (J--P)

Class VIII:

"Jump The Shot" was added as a play-type activity and "Follow The Leader" was deleted. (P)

Class IX: No Changes

Class X: No Changes

Class XI:

The "Ball Bounce Relay" was renamed "Wall Volley Relay". The boy is to now roll the ball to the next boy in line instead of running back with it after completing the volleying. (P)

Class XII: No Changes

Class XIII:

The "Skills Course" was renamed the "Obstacle Course" (C--P)
The "running broad jump" was deleted and replaced by the "standing broad jump". Instead of allowing the student a choice of hopping variations the "one-foot-hop" was specified. (J--P)

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3. Outline of Daily Class Plans: An outline of the daily class plans for Division I. of the Play-Oriented Physical Education Program appears on the next page.

Play-Oriented Physical Education Program
Division I:

Day:	Objectives:	Play-Type Activities:	Related Fundamentals:
1.	a.) To introduce class organizational procedures. b.) To present organized play-type activities which involve techniques basic to fundamental movement.	Tight Rope Relay Club Snatch	Walking Running Dodging
2.	a.) To reaffirm class organizational procedures. b.) To introduce play-type activities which are based on simple variations of fundamental movement.	Club Snatch Backward Walk Relay Beam Walk Relay	Walking a. backwards b. low bal. beam Running Dodging
3.	To continue participation in play-type activities which modify fundamental movement.	Beam Walk Relay Backward Walk Relay Strike and Chase	Walking variations Running Dodging
4.	To present play-type activities which modify a larger scope of fundamentals basic to movement.	Circle Weave Barrel Break Skip Tag	Walking-Running Running-Dodging Crawling and Skipping
5.	To introduce activities which are based on fundamental movement of a more difficult nature.	(Walk, Run and Skip Circle Weave) Cowboys and Indians	Walking and Running Skipping Hopping Variations
6.	To continue play-type activities which provide for further development of more difficult fundamental movement techniques.	Cowboys and Indians Magic Spots Crossing The Brook	Hopping a. one foot b. two feet Skipping and Leaping
7.	To reinforce student development relative to more difficult fundamental movement.	Crossing The Brook Jump The Shot	Leaping and Jumping Standing Brd. Jump
8.	To continue play-type activity which is basic to greater individual development.	Jump The Shot Jump Over Rope	Jumping a. over moving rope b. over moving object
9.	To introduce play-type activities which are based on simple techniques involving a large circumference ball.	Hot Spuds Circle Ball Wall Ball Relay	Passing a. two-hand chest b. baseball c. shovel
10.	To continue utilization of play-type activity which provides enrichment relative to the development of simple ball fundamentals.	Wall Ball Relay Target Pepper Squat	Passing variations Dribbling Simple Pivot
11.	To present play-type activities based on the utilization of a small circumference ball.	Pepper Squat Wall Volley Relay	Rolling ball Tossing ball Throwing ball Catching ball Fielding grounders
12.	To further enhance student development in simple ball handling techniques through organized play-type activities.	Pepper Squat Hot Ball Cross Over Relay	Enrichment (above)
13.	To evaluate the students concerning a number of selected fundamentals which have been inherent in the organized play-type activities presented in this division.	Obstacle Course	Walking Beam Running-Dodging Leaping Throw and Retrieve Dribble and Pass Standing Brd. Jump One-foot Hop

4. Presentation of Daily Class Plans: (See pages 113-38)

Play-Oriented Program
Division I: Class: I

Class Organization: (and specific formations)	Time Allotment:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Participation phase	28-32 min.
Explanation-Demonstration (4-6 min.)	
Organized play-type activity (22-28 min.)	
a.(relay)	
b.(parallel lines-opposite sides)	
4. Equipment and Supplies	
a. 1 indian club	
b. 8 colored practice jerseys	

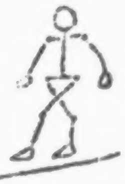
Warm-up Activity: (Instructor Leads)

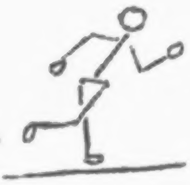
1. Head, shoulders, knees and toes (verbal-no count)
2. Arm circles (verbal-no count)
3. Scramble (seat, feet, stomach, back, knees, feet) (do not go from feet to back!)

Participation Phase:

1. Objectives:
   a. To introduce class organizational procedures.
   b. To present organized play-type activities which involve techniques basic to fundamental movement.

2. Explanation-Demonstration
   a. Walking
   b. Running
   c. Dodging


a.


b.

3. Organized Play-Type Activity: Time: 12-18
   a. Tight Rope Relay: Two groups form into relay lines. The first boy in each line begins the relay by walking heel and toe the length of the line and back. He then tags the next boy in line who continues the relay. If a boy should stray from the line, he must stop, place both feet back on the line and then continue. This is a competitive relay. (1/2 available time)

   b. Club Snatch: Two groups form along opposite sides of the gymnasium, and an indian club is placed in the center of the activity area. The instructor calls the name of a boy from each of the groups and they both run to the center of the floor and attempt to snatch the club. The boy who retrieves the club and runs back toward his side of the court while the other boy gives chase and attempts to "tag" him before he gets there. This process is repeated and may involve two or even three boys from each group. The "tag" is optional and can be deleted. (1/2 available time)

Teaching Techniques: The initial activity involves proper walking technique and it is necessary to emphasize the importance of stepping on the heel, then the toe, utilizing the arms for balancing purposes. A pace that is too fast may destroy the balance and cause the walker to steer off course. Abnormal hip and/or arm swing might also prove to be harmful to progress.

In the second activity, running and simple dodging are involved. Some stress should be placed on coordinated movement and also moving the body away from the out-stretched hand (arm). It is assumed that the "name calling" technique is better suited for this type of group then the traditional calling of assigned numbers.

Because this is the first day of class, little should be expected in terms of performance and it is possible that much confusion will materialize insofar as the students are concerned. Because of this, it may also be advisable to shift the relay to the second activity as more may be accomplished.

Comments: (after conducting class program)

1. The boys were intrigued both by the "head, shoulders, knees and toes," and the "scramble" warm-up activities. They experienced only minor difficulty with the concept involved with the "arm circles."

2. There was difficulty with many boys in their ability to stay on the line during the "Tight Rope Relay." They did, however, enjoy the relay and it was obvious that this particular play-type activity did contribute to the learning of fundamental movement skills.

3. The "Club Snatch" activity was quite successful from the standpoint of student enjoyment, however, the instructor must keep the game moving quickly so that undue disciplinary problems do not occur. It is recommended that names be called initially and then a signal (verbal) given from them to "go". The usage of numbers is not recommended unless the entire group is highly educable.

Play-Oriented Program
Division I: Class II:

Class Organization: (and specific formations)	Time Allotment:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Participation phase	28-32 min.
Explanation-Demonstration (4-6 min.)	
Organized play-type activity (22-28 min.)	
a.(parallel lines, opposite sides)	
b.(relay)	
c.(relay)	

4. Equipment and Supplies
   a. 1 indian club
   b. 8 colored jerseys
   c. two 12" balance beams

Warm-up Activity: (Instructor Leads)
1. Raise up on toes ("up-----down")
2. Side-straddle-hop (1-2 count*
3. Squat thrust (1-4 count)
4. Modified push-ups (5, from knees, "up----down")

Participation Phase:

1. Objectives:
   a. To reaffirm class organizational procedures.
   b. To introduce play-type activities that are based on simple variations of fundamental movement.

2. Explanation-Demonstration:
   a. Walking on low balance beam
   b. Walking backward
   c. Enrichment of previous techniques

3. Organized Play-Type Activity:
   a. Club Snatch: This type activity is repeated from the previous class hour. The instructor may attempt "assigned numbers" if he believes the class to be ready. (1/3 available time)

   b. Backward Walk Relay: Two groups form in relay position. The first boy in each line walks backward to a "turn-line" (20 feet away), and then runs back to tag the next boy in line. The relay continues. (1/3 available time)

   c. Beam Walk Relay: Two groups form in relay position. The first boy in each line walks the beam (one way only) and then runs back to tag the next boy in line. The competitive relay continues. (1/3 available time)

Teaching Techniques: "Club Snatch" is presented again as an activity which should aid in getting the boys off to a good start. It is recommended that two or more boys be called out on most occasions and that little time be taken between the snatching incidents. The instructor must also determine in advance whether or not colored jerseys are necessary so that undue confusion does not occur.

The initial relay involves walking backwards and this necessitates a careful explanation on how to take the reverse steps. The use of the arms in terms of balance and direction can also be included. Obviously demonstrations such as the above must be presented in such a manner that these students will understand; however, it is essential that these basic techniques are shown.

The second competitive relay game involves walking on the low balance beam. This should present an enjoyable challenge to the boys and at the same time help them to grasp fundamental walking techniques. Sotting should not be necessary as the 4" by 4" beams will be flat on the floor.

Concerning the "Draw Box," it is believed that in allowing the students the opportunity to draw for their own groups (strictly by chance) will be generally well accepted in this somewhat informal class setting. As stated previously, the students should automatically step out four steps when their number (or name) is called.

Although the instructor will lead the "Warm Up Activities" during the initial class hours some attention should now be given to determine students that will be able to assist in the near future.

Comments: (after conducting class program)

1. Much difficulty was experienced with the "squat thrust" and the "modified push-up". Basically, it appeared to be a problem of not understanding how they were to be done although the upper arm strength factor and the "hard work" aspect also seemed to be present. The "side-straddle-hop" was well accepted but the problem involving coordination with these boys becomes rather evident. "Raising up on the toes," did not seem to sufficiently challenge them but no difficulty was apparent.

2. The boys had apparently looked forward to "Club Snatch" and participated very willingly and with much enthusiasm.

3. The "Backward Walk Relay" was well received the the problem of running instead of walking was quite prevalent. These boys have the same feelings concerning fair play as do normal students and this must be taken into careful consideration during such an activity.

4. Enthusiasm, with few exceptions, was high on the "Beam Walk Relay". About half of the boys were able to walk quite successfully without having to stop or alter their action.

Play-Oriented Program
Division I: Class III:

Class Organization: (and specific formations) — Time Allotment:
1. Roll call and personal inspection (line) — 2--4 min.
2. Warm-up activities (open) — 4--6 min.
3. Participation phase — 28-32 min.
   - Explanation-Demonstration (4-6 min.)
   - Organized play-type activity (22-28 min.)
     - a.(relay)
     - b.(relay)
     - c.(parallel lines, opposite sides)
4. Equipment and Supplies
   - a. 8 colored practice jerseys
   - b. 2, 4" by 4" by 12' balance beams

Warm-up Activity: (Instructor Leads)
1. Side-straddle-hop
2. Windmill (1-4 count)
3. Squat-thrust
4. Modified push-ups (from 6 to 8)

Participation Phase:

1. Objective:
   To continue participation in play-type activities which modify fundamental movement techniques.

2. Explanation-Demonstration:
   - a. Pivoting
   - b. Enrichment

3. Organized Play-Type Activity:
   - a. Beam Walk Relay: This relay is held in the same manner as the previous class hour. (1/3 available time)

   - b. Backward Walk Relay: This is the same activity which was described during the previous class hour. The instructor may have the boys walk backwards in both directions or walk backwards one way only and forward (feet on the line) in returning. (1/3 available time)

   - c. Strike and Chase: Two groups face each other. Insofar as it is possible, boys on the two teams should be directly across from one another (opposing pairs) with an interval of at least four feet between the boys in the same group. The instructor designates one group as the "home team" and the other as the "visitors." When he gives a whistle signal the visitors walk toward the home team and when reaching them, tag the boy directly in their path. They then pivot and attempt to run back to their "goal line" before being re-tagged by the boy in pursuit. The number of successful tags are recorded and the situation will be reversed. The game can be played in innings to facilitate score keeping procedures. (1/3 available time)

Teaching Techniques: The backward walk and low balance beam relays are again utilized both from the standpoint of review and familiarity. It is expected that the performances should be somewhat improved.

The third activity emphasizes walking, then the pivot, and finally running. The students should be told specifically that they must walk overand that they can run back after they are tagged. The pivot, to be demonstrated, should be of the simple "drop leg" variety and it should actually be illustrated for the students as to how much space can be saved by utilizing this technique.

In demonstrating running, per se, perhaps the greatest concern should be placed on watching where one is going, keeping the weight on the frontal portion of the foot and why not to swing the arms excessively. At any rate, perfection cannot be expected and the hope is for progressive improvement through the play-type activity.

Comments: (after conducting class program)

1. The "squat thrusts" were generally much improved while the "modified push-up" continued to be difficult. Also, it did not appear that this type of student could be expected to follow the actions involved in the "windmill" activity. It is recommended that the instructor turn his back to the group momentarily so that they can more easily observe what is expected of them.

2. The "Strike and Chase" game should be quite carefully demonstrated and it also seemed necessary to re-demonstrate it shortly after the activity had begun. Despite the emphasis placed on the pivot during the explanation-demonstration period, the boys did not utilize this technique to any great advantage.

Play-Oriented Program
Division I: Class IV:

Class Organization: (and specific formations)
1. Roll call and personal inspection (line)
2. Warm-up activities (open)
3. Participation phase
    - Explanation-Demonstration (4-6 min.)
    - Organized play-type activity (22-28 min.)
        - a.(circle)
        - b.(circle)
        - c.(dispersed group)
4. Equipment and Supplies
    None

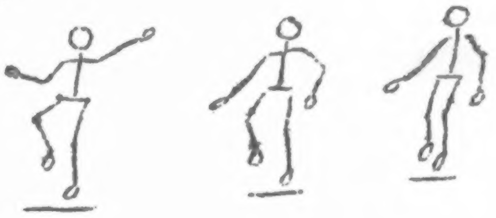
Time Allotment:
2--4 min.
4--6 min.
28-32 min.

Warm-up Activity: (Instructor Leads)
1. Windmill
2. Squat thrust
3. Modified push-ups (from 7 to 9)
4. Running in place (vary the pace)

Participation Phase:
1. Objective:
    To present play-type activities which modify a larger scope of techniques fundamental to basic movement.

2. Explanation-Demonstration:
    a. Crawling
    b. Skipping

b.



3. Organized Play-Type Activity:
    a. Circle Weave: Form two circles. The instructor assigns numbers (consecutive) to boys in both groups. Upon the signal to begin, the boy with the number "1" in each group will walk in a weave pattern through the circle and back to his spot. The number "2" boy will then do the same thing and the weave will continue until all have completed it. The second time through, the students would run instead of walk. This is a competitive activity. (1/3 availble time)

    b. Barrel Break: With the groups in the same circle formations the boys join hands. One boy is in the center of the circle and when the action begins he attempts to "break out" of the circle. He may run, dive, crawl, or use any other means, but may not hit or otherwise abuse any of the other boys. The boy in the center of the circle will be rotated by the instructor. To instill even greater competition, the boy in the center can be from the opposite group and a point could be awarded to the other team each time their boy go through (1/3 available time)

    c. Skip Tag: This is similar to ordinary tag except that all players including "it" must skip. Out-of-bounds restrictions should be specified by the instructor and depend on the class involved. Two groups can be utilized with each occupying one-half of the playing court. (1/3 available time)

Teaching Techniques: This is a day of contrasts and may result in some confusion depending on the adaptability of the particular class. In demonstrating how to dodge, the most significant advice probably will center on the in and out weave patterm. It might be advisable to draw a chalk "trail" on the floor to enable the students to follow it around and thus enhance the outcome of the activity.

"Barrel Break," brings a variation of crawling into the realm of class activity. It should be pointed out that one can squat, walk, go to hands and knees and scramble, or simply twist the body in such a way that success will be evident. Whatever does occur as a result of this activity, enjoyment along with better opportunity for versatility of movement are the desired outcomes. Skipping is being introduced partially in preparation for the techniques of hopping, jumping and leaping which are to follow.

Comments: (after conducting class program)

1. Individual performance in the "squat thrust" continued to show improvement. The same did not hold true regarding the "modified push-up". Upper arm-strength obviously is a continuing factor. The "windmill" and "running in place" activities by comparison were both quite successful from the standpoint of class participation.

2. The instructor must stand ready to help a boy find his way during the "Circle Weave Relay". It is also recommended that chalk or masking tape be used to mark out the route. The activity is regarded as appropriate for the educable mentally retarded boy.

3. "Barrel Break" as an activity went well and contributed to much excitement among the boys. There was no incident which involved injury and it was quite interesting to watch the boys attempt to break out of the circle. Merely breaking through clasped hands was the method employed most often. It is believed that a play-type activity such as this one could develop well for this type of youngster. Careful demonstration by the instructor prior to this activity is an important prerequisite.

4. "Skip Tag" was generally well received, however, a minority of boys found it quite difficult to grasp the technique involved. It is believed that additional exposure here would yield better and more gratifying results.

Play-Oriented Program
Division I: Class V:

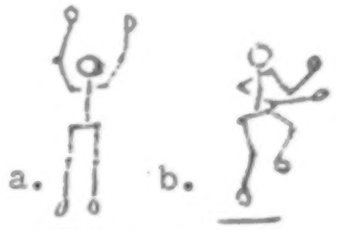
Class Organization: (and specific formations)
1. Roll call and personal inspection (line)
2. Warm-up activities (open)
3. Participation phase
    - Explanation-Demonstration (4-6 min.)
    - Organized play-type activity (22-28 min.)
        - a. (circle)
        - b. (parallel lines, opposite sides)
4. Equipment and Supplies
    - a. 8 colored jerseys

Time Allotment:
2--4 min.
4--6 min.
28-32 min.

Warm-up Activity: (Instructor Leads)
1. Windmill
2. Lift em and spread em (verbal)
3. Modified push-ups (from 8 to 10)
4. Running in place

Participation Phase:
1. Objective:
   To introduce activities that are based on fundamental movement techniques of a more difficult nature.

2. Explanation-Demonstration:
   a. Hopping with both feet together.
   b. Hopping on one foot only



3. Organized Play-Type Activity:
   a. Walk, Run and Skip Circle Weave Relay: Form two circles with the boys in each circle spaced at least three feet apart. The boy in each group who begins the weave will walk inside and outside of each of the others. The next boy does the same and the relay continues until a winner is declared. On the second try, the skip is utilized. (1/2 available time)

   b. Cowboys and Indians: Two groups form along opposite sides of the gymnasium and directly across from one another. One group is called the "Cowboys" and the other the "Indians" (other names may be substituted). Both groups move toward each other utilizing either the one-foot or two-foot hop whichever is designated by the instructor. When the instructor, or an appointed boy calls "Cowboys", they (the Cowboys) will run back toward their goal line with the Indians in pursuit. Points are scored for each successful tag and the boys should be encouraged to keep the tally themselves. (1/2 available time)

Teaching Techniques: The initial activity will require a good deal of physical stamina but it is thought that it should provide a worthy challenge as well as considerable enjoyment for the students. They may have some difficulty in remembering the order (walk, run and skip) and the instructor is advised to stand between the two circles and actively assist the students in this endeavor. If it is absolutely necessary, the student should go through the weave only once, walking, and then wait his regular turn to run and skip.

In playing the "Cowboys and Indians" game both of the hopping techniques should be utilized. Each must be carefully demonstrated prior to the activities so that the students understand as clearly as possible what they are to do.

Comments: (after conducting class program)

1. "Running in place" became very popular with the boys and they particularly enjoyed changing the pace without actually stopping to do so. Concerning the "lift em and spread em" activity, the tendency was not unlike that found among normal boys. More specifically this problem was concerned with the raising the legs too high and thus greatly lessening the effectiveness of the exercise.

2. The "Circle Weave Relay" worked best with the educable mentally retarded boy when he was walking as he tended to have more difficulty when running or skipping. The skipping technique itself limited a minority of the boys from any fruitful participation as they simply became frustrated. Despite this difficulty it is thought that additional exposure would make this a very worthwhile play-type activity involving each of the three variations.

3. "Cowboys and Indians" as the activity was called in this study represented the most popular play-type activity to date. The excitement among the boys ran high and both hopping variations worked well as a means of getting in toward the center of the play area.

Play-Oriented Program
Division I: Class VI:

Class Organization: (and specific formations)	Time Allotments:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Participation phase	28-32 min.

- Explanation-Demonstration (4-6 min.)
- Organized play-type activity (22-28 min.)
  - a. (parallel lines, opposite sides)
  - b. (relay)
  - c. (relay)

4. Equipment and Supplies
   - a. 10-15 pieces colored pasteboard

     or
   - b. masking tape to make appropriate markings

Warm-up Activity: (Instructor Leads)

1. Windmill
2. Lift em and spread em
3. Wing-flapper (1-4 count)
4. Running in place

Participation Phase:

1. Objective:

   To continue play-type activities which provide for further development of more difficult fundamental movement techniques.

2. Explanation-Demonstration:
   - a. Leaping
   - b. Enrichment of previous techniques

3. Organized Play-Type Activity:
   - a. Cowboys and Indians: The only significant change from the previous class hour is the addition of skipping as an approach technique. (1/3 available time)

   - b. Magic Spots: To begin with, the entire class is in a single line with the hands of each boy extended to the hips of the boy in front. When the whistle signal is given the line of boys moves about on, in, and around the "carpets" (pieces of cardboard or areas blocked in with masking tape). When the whistle sounds again the line must stop and those students on a "spot" form their own line. The activity begins again with those two lines and the leaders attempt to avoid contact between the groups. The activity continues until there are four or five groups at which time the entire class forms a single line and begins again. Each time the instructor stops the boys, he should designate a different technique (i.e. skip, one-foot-hop, or two-foot hop) as a means of moving about the area. (1/3 available time)

   - c. Crossing the Brook: (Relay) Form two relay lines. The first boy on each team runs to the edge of the brook (36" wide) and then leaps over to the other side. He then turns around and runs back only if he clears the brook. However, if the foot drags in the water, the boy must hop back, via the one-foot technique, holding the "wet foot". (1/3 available time)

Teaching Techniques: Because three specific techniques are being utilized in Cowboys and Indians, some care must be taken not to abruptly change the tempo.

Magic Spots presents a limited follow the leader opportunity, however, more emphasis from the standpoint of the student will probably be placed on the carpets, per se. It may be necessary here to remind the boys that they are to utilize the technique which has been designated as some may have a tendency to disregard directions.

Do not overemphasize the penalty involved in the relay, as some of the boys may deliberately get their feet wet. If this should occur in excess, it is recommended that this option be discontinued.

Comments: (after conducting class program)

1. Little improvement was noted in uniformity regarding the "lift em and spread em" activity. The "wing-flapper" like the windmill was confusing for them and again it is recommended that the instructor face away from the group momentarily while demonstrating the activity.

2. "Cowboys and Indians" and "Crossing the Brook" were both well received. Deliberate stepping into the imaginary brook was not at all evident and by the same token the violators did not balk at holding one foot while hopping back to tag the next boy in line.

3. "Magic Spots" as a play-type activity was generally confusing to the majority of the boys in that they could not understand that they were to attempt to avoid the spots. On the contrary, they attempted to land on one each time the whistle sounded. It is recommended that this activity be altered only slightly to that of the traditional "cake-walk" where there is one more boy than there are spots on the floor.

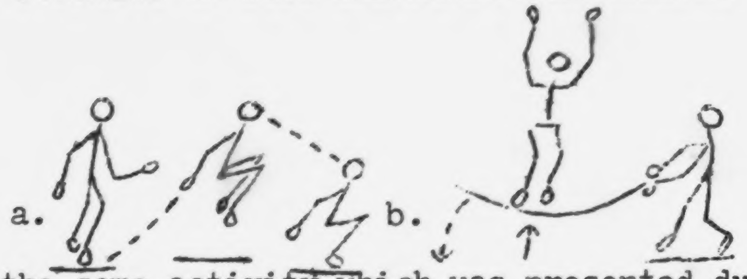
Play-Oriented Program
Division I: Class VII:

Class Organization: (and specific formations)
1. Roll call and personal inspection (line)
2. Warm-up activities (open)
3. Participation phase
   - Explanation-Demonstration (4-6 min.)
   - Organized play-type activity (22-28 min.)
     - a. (relay)
     - b. (circle)
4. Equipment and Supplies
   - a. 2, 14' ropes (heavy clothesline)
   - b. 2, discarded sneakers

Time Allotment:
2--4 min.
4--6 min.
28-32 min.

Warm-up Activity: (Instructor Leads)
1. Touch toes (1-2 count)
2. Wing flapper
3. Lift em and spread em
4. Running in place

Participation Phase:
1. Objective:
   To reinforce student development relative to more difficult fundamental movement techniques.
2. Explanation-Demonstration:
   - a. Standing broad jump
   - b. Jumping over a moving object



3. Organized Play-Type Activity:
   - a. Crossing The Brook: This is the same activity which was presented during the previous class hours. The initial width of the brook will begin at 36" amd will be increased to 42" and 48" respectively (should be done with masking tape prior to class). The boys will attempt the standing broad jump over the first two and are to leap over each of the three brooks. This means that five separate relay games will be held and more if time permits. The "wet foot" concept remains as optional. (1/2 available time)

   - b. Jump The Shot: Form two circles. One boy stands in the center and swings a rope with a sneaker tied on the end in a circular motion. The boys are to jump over the "shot" utilizing either a hop or skip-type approach. If a boy is slapped in the ankles by the pole he takes over as the "swinger" and the activity continues. The contest between groups is to see who can go for the longest time without a mistake. Center boys should be changed every time the circles stop and a new contest begins. (1/2 available time)

Teaching Techniques: The standing broad jump must be carefully demonstrated so that the boys understand that both feet should leave the floor together and land at the same time. It is important that they understand the role of the arms and why the knees should be more than slightly flexed.

In demonstrating how to properly jump over the "shot" emphasize watching the rope. This may prove to be the initial experience in jumping over a moving object for many and frustration, therefore, should not be totally unexpected. Deliberate "blunders" might also be expected so that the opportunity to become a swinger is fulfilled. For this reason, the boys who are not getting the chance to swing should be shuttled into the middle by the instructor.

Comments: (after conducting class program)

1. The boys enjoyed the "toe touching" activity and certainly were not unlike the normal student in not attempting to keep their knees straight. Little improvement was noted in the "lift em and spread em" especially regarding directions as to how high the legs were to be lifted from the floor.

2. Two widths for the brook (crossing the brook) are sufficient and 36" and 42" respectively are recommended for this particular age group. The boys really enjoyed this play-type activity and both techniques, leaping and the standing broad jump, were handled reasonably well. The relay lines should be formed right behind the take-off line for the standing broad jump or numerous boys are apt to forget and leap over instead. The "wet foot" option is definitely recommended.

3. "Jump The Shot" as an activity was quite successful. Problems did occur with the middle man (swinger) as only a small number of boys are capable in this regard. A second problem was evident in that they often will swing it too high thus endangering the welfare of the other boys. The instructor might well consider himself a participant and aid at least one of the circles by serving as a "swinger".

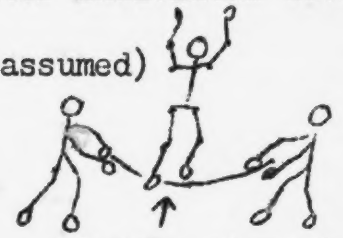
Play-Oriented Program
Division I: Class VIII:

Class Organization: (and specific formations) — Time Allotment:
1. Roll call and personal inspection (line) — 2--4 min.
2. Warm-up activities (open) — 4--6 min.
3. Participation phase — 28-32 min.
    - Explanation-Demonstration (4-6 min.)
    - Organized play-type activity (22-28 min.)
        - a. (semi-circle)
        - b. (circle)
4. Equipment and Supplies
    - a. 2 ropes 14-16' in length
    - b. 2 14' ropes
    - c. 2 discarded sneakers

Warm-up Activity: (Instructor and Students Lead)
1. Touch toes
2. Wing flapper
3. Lift em and spread em
4. Chu-Chu train (treadmill) (verbal)

Participation Phase:
1. Objective:
   To continue play-type activity which is basic to greater individual development.

2. Explanation-Demonstration: (Review when necessary is assumed)
   - a. Jumping over a moving rope
   - b. Enrichment

a.


3. Organized Play-Type Activity:
   - a. Jump The Shot: This activity is continued from the previous class hour. Competition between the two groups should be emphasized. (1/2 available time)
   - b. Jump Over The Rope: Form two semi-circles. Two boys swing the rope while the others come through individually and attempt to jump over the moving rope as many times as possible. The number of successful jumps (i.e. x=0, x=2, x=0, x=3, x=1) for one group are to be compared with those of the other to determine who is the winner of that contest. The contests continues with at least one new swinger being added each time. (1/2 available time)

Teaching Techniques: "Jump The Shot" is being continued with the hope that a better performance will be in evidence concerning most of the boys. It is believed that participation in this activity will be quite avid and care will have to be taken to see that the swinger does not get carried away.

Even with the experience of the previous class hour the rope swinging activity may prove to be quite difficult for some, however, the "contest" element should spur more effective participation. Some caution should be exercised to insure that the ropes are being swung properly and it is quite possible that some students will have to be passed over if they are unable and/or unwilling to swing the rope with some degree of reliability.

Comments: (after conducting class program)

1. The "chu-chu train" (treadmill) proved to be highly acceptable to the boys as a warm-up activity. Success was recognized easily and the mimetics involved seemed to help considerably. No count in this activity is recommended and the boy is encouraged to develop his own rhythm. There was definite improvement noted in the "wing-flapper". Also there remained little question that these boys were capable of remembering and/or improving upon past performances in warm-up activities to which they had been exposed.

2. While "Jump The Shot" must be classified as highly successful both from a doing and learning by doing viewpoint, "Jump Over The Rope" is not. Individual instruction would seem to be necessary here as these boys did not acquire the knack of jumping ov the rope on their own. Successive exposure no doubt would aid them in this regard but individual instruction does appear to be a pre-requisite.

Play-Oriented Program
Division I: Class IX:

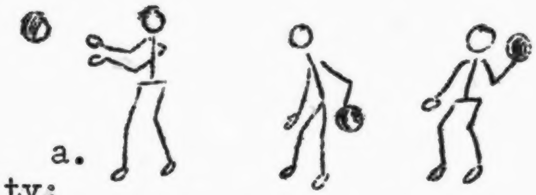
Class Organization: (and specific formations)
1. Roll call and personal inspection (line)
2. Warm-up activities (open)
3. Participation phase
    - Explanation-Demonstration (4-6 min.)
    - Organized play-type activity (22-28 min.)
        - a.(circle)
        - b.(circle)
        - c.(relay)
4. Equipment and Supplies
    - a. 4 regulation sized basketballs

Time Allotment:
2--4 min.
4--6 min.
28-32 min.

Warm-up Activity: (Instructor and Students (2) Lead)
1. Touch toes
2. Wing flapper
3. Rope-jumping mimetics (vary the pace)
4. Chu-chu train

Participation Phase:
1. Objective:
   To introduce play-type activities which are based on simple techniques involving a large circumference ball.

2. Explanation-Demonstration:
   - a. Passing (basketball)
       - two hand chest
       - underhand shovel
       - baseball
   - b. Catching (basketball)


a.

3. Organized Play-Type Activity:
   - a. Hot Spuds: Form two circles. Two basketballs are put into play within each circle and the boys simply attempt to roll the balls out of the ring. Players stand, not sit and actively attempt to prevent the balls rolled toward them from getting outside of the circle. The balls are to be rolled utilizing the underhand shovel type technique. Competition between groups is encouraged. (1/3 available time)

   - b. Circle Ball: Form two circles. One student from each group goes into the middle and proceeds to pass the ball to each of the others via the two-hand chest pass. If the leader drops a well passed ball, the passer takes his place and the activity continues. Competition concerning the number of dropped passes or the first pass dropped is encouraged. (1/3 available time)

   - c. Wall-Ball Relay: Form two relay groups. This is a simple relay whereby the first boy in each group runs to a line three feet from the wall, stops, and passes the ball against the wall. He then recovers the ball and passes it back to the next boy in line via the baseball pass. The competitive relay continues. (1/3 available time)

Teaching Techniques: It must be remembered at the outset that the foregoing activities are play-type, and, that mistakes probably will be quite numerous. Much care must also be taken at the outset to show the students how to pass and catch the ball with two hands and then how to pass with only one hand (baseball). Also the technique of rolling the ball with one hand and stopping a rolled ball with both hands should be demonstrated. As was true in the skill-oriented program, some emphasis must be given to combating "stiff fingers" and to keeping an eye on the ball.

Although the first two activities would seem to be highly motivating, it is believed that competition between groups is necessary. In the Wall-Ball Relay little emphasis should be placed on accuracy and more on simply succeeding in getting the ball to the wall and returning it, via a longer pass, to the next student in line.

Comments: (after conducting class program)

1. Rope jumping mimetics like "Running in place", "Head, shoulders, knees and toes", "scramble", and "chu-chu train" proved to be very popular with the boys. Again they appreciated the change in pace that this type of activity offers and it was not one where a definite count was necessary.

2. Utilizing two balls within a circle during "Hot Spuds" did not prove to be highly desirable. It is recommended that only one be used as the second one tends only to confuse the issue and thus spoil the game. The activity itself was satisfactory but the possibility of the ball being thrown too hard or directly at someone is real and makes it necessary for an instructor to know his group well.

3. The formation of "Circle Ball" might well be changed to a semi-circle or a pepper group. The boy in the center experienced difficulty in knowing to whom he had already passed the ball! If the circle is retained it is recommended that following a successful exchange the boy in the outer circle be required to sit down so that excessive confusion will not exist. The game is an excellent one in terms of exposing the boys to the mechanics of passing and catching.

4. In the "Wall Ball Relay" the emphasis on competition takes away somewhat from the quality of the pass and subsequent catch and return pass in that the boys are in such a hurry. It is recommended, therefore, that in some instances the instructor should select the best looking group rather than the one which finished first. To do this would require at least three groups.

Play-Oriented Program
Division I: Class X:

Class Organization: (and specific formations)		Time Allotment:
1. Roll call and personal inspection (line)		2--4 min.
2. Warm-up activities (open).		4--6 min.
3. Participation phase		28-32 min.
Explanation-Demonstration	(4-6 min.)	
Organized play-type activity	(22-28 min.)	

- a. (relay)
- b. (circle)
- c. (pepper)

4. Equipment and Supplies
   - a. 2 regulation basketballs
   - b. 2 play-ground balls of comparable size

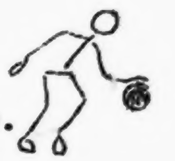
Warm-up Activity: (Instructor and Students Lead)

1. Touch toes
2. Windmill, sitting (1-4 count)
3. Rope-jumping mimetics
4. Chu-chu train

Participation Phase:

1. Objective:
   To continue utilization of play-type activity which provides enrichment relative to the development of simple ball techniques.

2. Explanation-Demonstration:
   - a. Bounce passing
   - b. Dribbling
   - c. Simple pivot



3. Organized Play-Type Activity:
   - a. Wall Ball Relay: This is a continuation of the previous class hour with the exception that the dribble and simple pivot are inserted in place of running with the ball. This is a competitive relay; however, a quality performance should not be expected. (1/3 available time)

   - b. Target: Form two large circles. One boy, the target, stands in a small inner circle (3' in diameter). The boys in the outer circle attempt to hit the target below the waist using the two-hand-chest type pass and PLAYGROUND BALLS. The target may duck, turn, dodge or even jump to avoid being hit, but may not leave the small circle. The player hitting the target at waist level or below, becomes the next target and the play-type activity continues. The instructor should be certain that every student has the opportunity to be a "target". (1/3 available time)

   - c. Pepper Squat: Form two pepper groups. One boy, the leader, stands facing the rest of his group. He passes to each of the others. If a boy catches the pass and makes a good return pass he will squat down. The first group to have everyone squatting wins that contest. The relay continues with new leaders. The types of passes utilized can be varied for this particular activity. (1/3 available time)

Teaching Techniques: The dribble must be carefully demonstrated to the class. Not a great deal of emphasis should be placed on using only one hand but it should be shown that this may work more effectively. Caution them against slapping the ball, but do not expect them to keep their heads up as this may be difficult for many of them to do. The simple reverse or "drop leg" pivot should be shown with the stress being on turning with one foot only. The relay, of course, does entail dribbling, the pivot and passing. In the second activity inter-group competition is not necessary as this should prove to be a very highly motivating experience. The emphasis is on accuracy, agility and continuity and the type of pass allowed should not be varied.

"Target" offers a change-up and still allows the accuracy which is the name of the game. Cautions must be taken to prevent "point-blank" passing.

Comments: (after conducting class program)

1. The "windmill sitting" warm-up activity did not confuse the boys nearly as much as had the regular windmill (standing). The boys were able to pay more attention to what they were supposed to be doing.

2. The "Wall Ball Relay" was again quite successful and the improvement concerning the techniques involved was very noticable.

3. "Target" proved to be much fun for the boys; however, the concept of dodging is not good and in numerous instances the boy simply will not evade the ball at all. There appeared to be a direct relationship here with those boys who were of a higher educability level. They did not enjoy getting hit while those not so fortunate did not let it bother them. It is recommended in working with the educable mentally retarded youngster that the portion below the knees, not the waist, be designated as the target area.

4. The "Pepper Squat" was highly successful both from the standpoint of individual enjoyment and the students ability to comprehend the mechanics which were involved.

5. It is recommended that the baskets be covered during such activity to help avert the problem of boys wanting to shoot baskets, which is only quite natural for this age group.

Play-Oriented Program
Division I: Class XI:

Class Organization: (and specific formations)		Time Allotment:
1. Roll call and personal inspection (line)		2--4 min.
2. Warm-up activities (open)		4--6 min.
3. Participation phase		28-32 min.
Explanation-Demonstration	(4-6 min.)	
Organized play-type activity	(22-28 min.)	
a. (pepper)		
b. (relay)		
4. Equipment and Supplies		
a. 3 regulation softballs		
b. 3 soft soft balls		

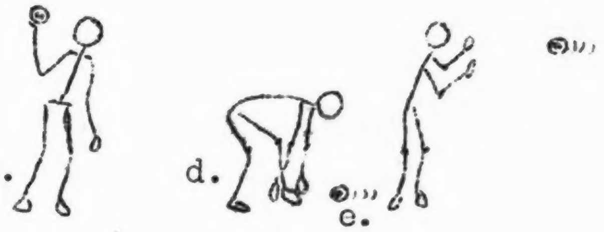
Warm-up Activity: (Instructor and Students Lead)

1. Dribble-pivot mimetics (verbal)
2. Windmill, sitting
3. Rope-jumping mimetics
4. Chu-chu train

Participation Phase:

1. Objective:
   To present play-type activities based on the utilization of a small circumference ball.

2. Explanation-Demonstration:
   - a. Rolling the ball
   - b. Tossing the ball
   - c. Throwing the ball
   - d. Stoping ground balls
   - e. Catching balls



3. Organized Play-Type Activity:
   - a. Pepper Squat: Form three pepper groups with one student as the leader for each. He will a) roll, b) toss (underhand), c) throw the softball to the boy on his left who is to return it. If the exchange is successful, the boy squats down while the procedure continues with the others. Each boy should have at least thrre opportunities to be a leader and each time should utilize a different delivery. Competition between groups is called for. (1/2 available time)

   - b. Wall Volley Relay: Form three relay groups. The first boy in each line runs to a predetermined line (6' from wall) throws and retrieves the ball three times. He then turns around and rolls the ball back to the next boy in line. The competitive relay continues. (1/2 available time)

Teaching Techniques: The initial emphasis during the explanation-demonstration period should be concerned with why not to throw the ball hard at close range! The proper mechanics involved with tossing and throwing underhanded, throwing overhand, and of course, how to utilize the fingers and/or hands for successful catching must be carefully demonstrated. The picking up of a roller (ground ball) or a bounce should also be shown in simple form so that these boys are given the opportunity to grasp some of the details.

It must be remembered that past experiences may play a large role in the success of these activities. Because of this possibility abilities may vary a great deal more than in the previous activities and it is for this reason that confusion and/or frustration may appear in more abundance than is usually encountered.

It is hoped that a regulation sized softball can be used; however, if necessary a larger (soft-soft) ball can be used for part of the time or if the level of achievement demands it, for the entire time.

Comments: (after conducting class program)

1. Not as much difficulty was encountered with the "dribble-pivot mimetic" as had been previously anticipated. The performance in the "windmill sitting" very definitely improved while rope jumping mimetics" and the "chu-chu train" remained very popular. When so-called "popular" warm-up activities are included only minimal urging is necessary with those boys who might otherwise refuse to participate entirely.

2. These students do forget rather easily the type of throw they are supposed to be using in play-type activities such as the "Pepper Squat". The instructor should remain aware of this problem and be ready to offer verbal correction.

3. Like the "Pepper Squat", the "Wall Volley" was well accepted and the enthusiasm involved with this play-type activity was very high indeed. The most prevalent difficulty which did occur was the problem of successfully picking up the ground (rolling) ball. Also a number of the boys either forgot or were unable to comprehend "three" and the instructor had to do the counting for several of them.

4. In both of the foregoing play-type activities the competitive feeling ran very high and the more highly skilled boy generally exhibited despair at the inability of some to perform satisfactorily. Although this was not the first time this had happened, the frustration was more evident during these particular activities. The instructor should stand ready to sooth hot tempers on the one hand and to bolster the individual ego on the other.

5. Soft-soft balls were not used at the Fernald School at all but they were utilized for the most part at the Wrentham School. For many of these boys the larger ball seemed more difficult to handle than the regulation softball.

Play-Oriented Program
Division I: Class XII:

Class Organization: (and specific formations)	Time Allotment:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Participation phase	28-32 min.
Explanation-Demonstration (4-6 min.)	
Organized play-type activity (22-28 min.)	
a. (pepper)	
b. (circle)	
c. (relay)	
4. Equipment and Supplies	
a. 3 regulation softballs	
b. 3 soft-soft balls	

Warm-up Activity: (Instructor and Students Lead)
1. Dribble-pivot mimetics
2. Windmill, sitting
3. Bicycle and kickover (verbal)
4. Rope-jumping mimetics

Participation Phase:

1. Objective:
   To further enhance student development in simple ball handling techniques through organized play-type activities.

2. Explanation-Demonstration:
   Enrichment of previous techniques. Soft-soft balls are still optional.

3. Organized Play-Type Activity:
   a. Pepper Squat: This is to be conducted in the same manner as the previous class hour with competition between groups. (1/3 available time)

   b. Hot Ball: Form three circles with an interval of approximately five feet between each boy. With one ball each group will see how long they can keep it going before it is mishandled or dropped. The ball is to be moved in a circular pattern (not across) and it must be tossed from boy to boy. The contests, between groups, to see who can keep the ball going for the longest period are expected to be spirited ones. (1/3 available time)

   c. Cross-over Relay: Form three relay groups. The first boy in each line has a softball. To begin the relay he runs to the goal line (20'), turns and throws the ball back to the next boy in line and then stays there instead of returning to his line. The next boy catches the ball and repeats the action stepping in front of the first boy. The competitive relay continues until all of the boys from one group are on the other side. Both the rolling ball and the regularly thrown ball techniques should be utilized in this relay (assuming more than one relay can be held in the time allotted). (1/3 available time)

Teaching Techniques: So that the boys gain a better and more practical understanding of the techniques concerning simple ball handling the explanation-demonstration from the previous class hour should be duplicated.

In leading off with "Pepper Squat" the boys will find themselves in a familiar activity. The distance should be increased somewhat; however, this will depend on the particular group and/or leader. Again, it may be quite appropriate to caution boys against hard throwing at close range. Violators must be dealt with in a firm manner.

The second activity demands the underhanded toss and for purposes of safety the circle should be expanded. The boys who are experiencing serious difficulty in catching the tossed ball should be encouraged to bring the ball in toward the body when attempting to hold on to it.

The relay offers the opportunity for the longer throw. It will be interesting to see how well they are able to control the throwing as a group.

Comments: (after conducting class program)

1. It was very difficult for the majority of these boys to grasp the technique of supporting the lower body weight with the arms propped under the hips when attempting the "bicycle-kickover". This had to be demonstrated individually to almost every boy. On the other hand, they enjoy attempting to bring the legs over to touch the floor back of their heads.

2. In "Hot Ball" the problem did occur on occasion with one boy throwing the ball too hard to the boy next to him in the circle. Despite this the activity would have to be classed as successful and certainly it is recommended for usage with this type of group.

3. The "Cross-Over Relay" also is highly recommended; however, the instructor should stand at the turn-line to remind the boys that they are to remain on that side and not return as they ordinarily would in most relay-type games.

4. It is significant that these boys utilized the underhand toss far more than any other technique during the play-type activities. This method represented the quickest way for the boy to get rid of the ball. Such is an apparent fallacy where competitive games are concerned.

Play-Oriented Program
Division I: Class XIII:

Class Organization: (and specific formations)	Time Allotment:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Participation phase	28-32 min.
Explanation-Demonstration (4-6 min.)	
Organized play-type activity (22-28 min.) special obstacle course	
4. Equipment and Supplies	

- a. 12' balance beam
- b. 8 folding chairs or traffic cones
- c. 3 wooden boxes (10" x 10" x 10")
- d. paste board container large enough to hold a basketball and softball
- e. 2, 5' x 10' x 2" tumbling mats

Warm-up Activity: (Instructor and Students Lead)
1. Dribble-pivot mimetics
2. Windmill, sitting
3. Bicycle and kickover
4. Kneebends (1-2 or "down---up")

Participation Phase:

1. Objective:

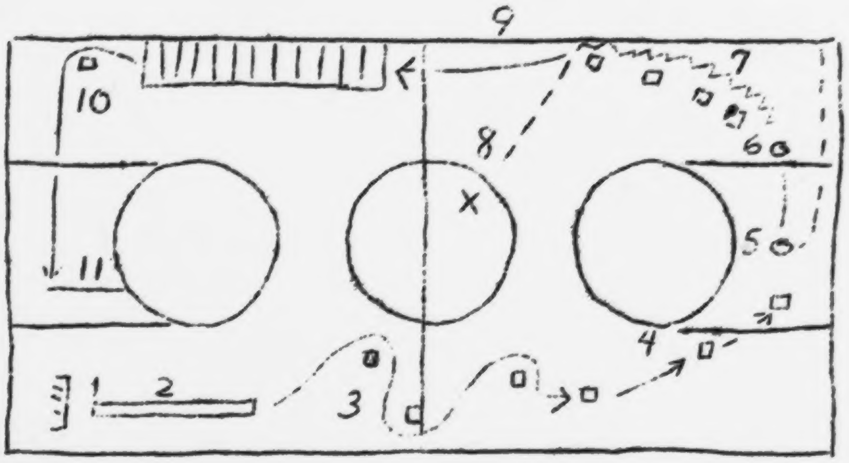
   To evaluate the students concerning a number of selected techniques that have been inherent in the organized play-type activities presented in this section.

2. Explanation-Demonstration:

   The description of the "obstacle course" is as follows: 1) the boy begins here, starting line, and gets on to the balance beam (see diagram and #2). 3) He then runs around a three-chair* obstacle (zigzag) and then 4) runs and leaps over three 10" x 10" x 10" wooden containers. 5) He then takes the softball out of the pasteboard box, throws it against the wall, retrieves it and places it back in the box. 6) He then takes the basketball out of the box and dribbles it a short distance to the end of the row of chairs* where he passes it to the instructor or another student. (See 7 and 8). 9) He then does a running broad jump, goes around the chair* and hops via one-foot to the finish line (See 11).

   * Traffic cones, if available, can be substituted for folding chairs.

3. Organized Play-Type Activity:



Teaching Techniques: In viewing the diagram above and the foregoing description of the "obstacle course", it can be readily ascertained that some of the boys may experience minor degrees of difficulty and such should not be totally unexpected.

The instructor should initially demonstrate the course by walking through and performing each of the techniques that are called for. He should then run through the course a second time without making any particular comments. The students are to then be told that they are going to run through the course twice. They should be further instructed to perform each technique as well as possible and as quickly as they are able.

Competition will be prevalent in that the times posted by the students in each of the two groups will be totaled. The group emerging with the best total time will be called the winner. Because the course is being run through twice it is possible for both groups to emerge as "winners".

The instructor, in utilizing the special evaluation form, should rate the students on the basis of their performances and to record the best time for each boy. It is also recommended that the instructor or another dependable student be prepared to lead those boys through the course who may encounter difficulty.

Comments: (after conducting class program)

1. The boys reacted favorably to the "kneebend" (thigh parallel to the floor). The arms were outstretched in front of the body and the count was continuous. It is recommended that very little delay be allowed whenever this type of student is involved with an activity which does require balance for success as the kneebend does.

2. The reaction to the "Obstacle Course" was exceptionally good and the sense of competition primarily from an individual student standpoing was keen. Because of the time involved it was more difficult to generate interest in the team outcome per se.

3. It is recommended that when a course such as this is administered for the educable mentally retarded boy that the following points be considered.
   a. That arrows (masking tape) be put on the floor to aid the boy in following the proper route (i.e. zig zag through chairs).
   b. That at least three seconds be added on to the total time recorded for an individual whenever he fails to successfully encounter one of the obstacles.
   c. That various students be utilized as spotters and/or judges at strategic points throughout the course.

4. Activity such as this is highly recommended both from the standpoint of competitive play-type activity and as a natual setting for purposes of student evaluation.

G. Division II: Related Play-Type Activities and Modified Games Based on Fundamentals of Soccer and Volleyball:

1. Introduction: This division, consisting of thirteen class hours, began on March 16, 1966, at both schools and terminated on April 13, at the Fernald School and on April 20 at the Wrentham School.

2. Program Changes, Additions and Deletions: The material below enumerates the specific changes, additions and deletions which were made following correspondence with the Jury, completion of the Pilot Study and final conferences with the Doctoral Committee. These revisions are incorporated into the class plans which appear in this division.

Play-Oriented Physical Education Program
Division II:

Changes, Additions and Deletions: Recommended By: J=Jury, C=Doctoral Committee and P=Pilot Study.

Class I:

"Pepper Squat" was added as a play-type activity. (P)

Class II:

"Hot Ball" was added as a play-type activity. (P)

Class III: No Changes

Class IV: No Changes

Class V:

To avoid confusion, passing via the foot was inserted into the directions for "Touch It IF You Can" (C)

Class VI:

The "Wall Bounce Relay" was renamed "Wall Volley Relay". (C)

Class VII: No Changes

Class VIII: No Changes

Class IX:

Due to the difficulty involved, "Net Relay" was deleted as a play-type activity.

Class X: No Changes

Class XI:

"Wall Volley Relay" was added as a play-type activity. (P)

Class XII:

"Pepper Pass Contests" were added as a play-type activity. (P)
"Bubble Ball" was deleted as a play-type activity. (P)

Class XIII:

The dimensions for the rectangular wooden frame called for in the "Big Eye" were altered from 4'x6' to 2'x4'. The shooting line was moved back to a distance of fifteen feet. (P)

3. Outline of Daily Class Plans: An outline of the daily class plans appearing in this division is presented on the following page.

Play-Oriented Physical Education Program
Division II:

Day:	Objectives:	Play-Type Activities:	Related Fundamentals:
1.	To introduce play-type activities which involve fundamentals of soccer.	Hot Ball Pepper Squat Circle Soccer	Passing Inside of foot Trapping
2.	To provide experiences in a more difficult play-type activity which is based on fundamental soccer techniques.	Line Soccer Dribble-Pass Relay Hot Ball	Passing Trapping Dribbling
3.	To present activities that generally require at least a minimal sufficiency in selected fundamental soccer techniques.	Soccer Goal Kick Baseball Soccer	Dribbling-Shooting ToeKick Long Pass
4.	To continue with play-type activities which reinforce the opportunity to learn and/or develop fundamentals of soccer.	Soccer Goal Kick Baseball Soccer	Dribbling-Shooting Toe Kick Long Pass Limited Blocking
5.	a.) To present play-type activities which provide further developmental opportunity in fundamental soccer techniques. b.) To provide opportunity for concentrated team play.	Touch IT If You Can Simple Soccer	Passing Trapping Shooting Dribbling Limited Blocking
6.	To further enrich and reinforce student development of soccer fundamentals through the medium of organized play-type activity.	Wall-Volley Relay Simple Soccer	Passing Trapping Shooting Dribbling Limited Blocking
7.	To introduce play-type activities which involve fundamentals of volleyball.	Keep It Up Fist Fungo	Volleying a. above the waist b. below the waist Serving (closed palm)
8.	To continue involvement in play-type activities which include selected volleyball fundamentals.	Keep It Up Fist Fungo Touch It If You Can	Volleying Serving a.closed palm b. fist
9.	To foster further development of volleyball fundamentals through organized play-type activity.	Touch It If You Can Volley Baseball	Volleying Passing Serving variations
10.	To continue participation in play-type activities which generally require more efficient development of volleyball fundamentals.	Volley Baseball One Bounce Volleyball	Serving variations Passing Volleying
11.	To present play-type activity, the success of which depends to a large degree on the achievement level of the individual students.	Wall Volley Relay Pepper Pass Contests One Bounce Volleyball	Directed passing Serving variations Volleying
12.	To introduce play-type activities which demand greater versatility of performance.	Pepper Pass Contests Wall Volley Relay Simple Volleyball	Continual Volley Directed passing Serving variations
13.	To present play-type activities which also allow opportunity for evaluation of student achievement.	Serving Into Hole Big Eye Individual Volley	Serving Soccer Kick Volleying

4. Presentation of Daily Class Plans: (See pages 141-66)

Play-Oriented Program
Division II: Class I:

Class Organization: (and specific formations)
1. Roll call and personal inspection (line)
2. Warm-up activities (open)
3. Participation phase
   - Explanation-Demonstration (4-6 min.)
   - Organized play-type activity (22-28 min.)
     - a.(circle)
     - b.(pepper)
     - c.(divided circle)
4. Equipment and Supplies
   - a. 2 slightly deflated soccer balls
   - b. 8 colored jerseys

Time Allotment:
2--4 min.
4--6 min.
28-32 min.

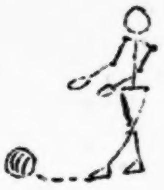
Warm-up Activity: (Instructor and Student Lead)
1. Bicycle and kickover(follow leader)
2. Kneebends(arms outstretched, 1-2 count)
3. Straight-leg-stretcher(reach for imaginary line)
4. Sit-ups(arms outstretched, from 8 to 10)

Participation Phase:

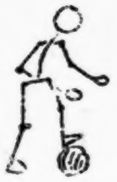
1. Objective:
   To introduce play-type activities which involve fundamentals of soccer.

2. Explanation-Demonstration:
   - a. Passing (inside of foot)
   - b. Trapping (single foot)

a.



b.



3. Organized Play-Type Activity:
   - a. Hot Ball: Form two circles. The students in each group pass the ball around or through the circle area. The ball is stopped by means of the single-foot trap. Each time the ball gets outside of the circle a point is scored for the other team. (1/3 available time)

   - b. Pepper Squat: From two pepper groups with leader toward a corner of the play area. The leader passes via the inside-of-foot technique to the boy on his left who traps the ball and returns it. If both are successful the boy will squat down and the leader will go on to the next boy in his semi-circle. The first group to have everyone squatting is the winner. The activity will continue with a new leader. (1/3 available time)

   - c. Circle Soccer: Two groups form one-half of a large single circle. Utilizing one ball, each team attempts to get the ball through the other team and thus score a point. One team wears colored jerseys to facilitate scoring. (1/3 available time)

Teaching Techniques: The play-type activities should provide enjoyment as well as contributing to a learning-by-doing situation. Basically each activity involves passing and trapping the soccer ball. The inside-of-foot technique should be encouraged and the single-foot trap used.

Show little concern if the students tend to use their hands on occasion as long as they seem to grasp the basic concept of using the foot to pass and trap. Usually the direct toe-kick will be attempted by the students. Limited verbal commentary can aid to curtail this.

Unless past experience of students has been extensive, it is expected that the three play-type activities will be highly motivating and that success even in a minimal form will be encouraging to the individual student.

Comments: (after conducting class program)

1. The "straight-leg stretcher" was quite difficult for the students to comprehend. They had difficulty in pressing the hands back toward an imaginary line behind them. The performance of the "sit-ups" (arms outstretdhed) was not particularly good. It appeared as though they were confused after having been tested (AAHPER) originally with the arms behind the neck. It was obvious that most of the boys needed further development physically.

2. The scoring on "Hot Ball" did not work well as the students did not comprehend it. They did enjoy the activity, however, and motivation to get the ball out of the circle was abundant.

3. The "Pepper Squat" game went well and the pattern utilized was familiar to the boys from previous experience. The older boys have a tendency to look away from an apparent breach of the rules.

4. "Circle Soccer" was highly motivating and the only real problem was kicking the ball too hard or too high. It is recommended that the circle be as large as possible in circumference.

Play-Oriented Program
Division II: Class II:

Class Organization: (and specific formations)		Time Allotment:
1. Roll call and personal inspection (line)		2--4 min.
2. Warm-up activities (open)		4--6 min.
3. Participation phase		28-32 min.
Explanation-Demonstration	(4-6 min.)	
Organized play-type activity	(22-28 min.)	
a. (parallel lines)		
b. (relay)		
c. (circle)		
4. Equipment and Supplies		
a. 3 slightly deflated soccer balls		
b. 8 colored jerseys		

Warm-up Activity: (Instructor and Student Lead)

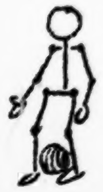
1. Trunk twister (give starting instructions)
2. Kneebends
3. Straight-leg stretchers (1-4 count)
4. Sit-ups (from 10 to 12)

Participation Phase:

1. **Objective:**
   To provide experiences in a more difficult play-type activity which is based on fundamental soccer techniques.

2. **Explanation-Demonstration:**
   a. Dribbling
   b. Trapping (following the dribble)

a.



3. **Organized Play-Type Activity:**
   a. **Line Soccer:** Form two parallel lines. Utilizing the entire floor area each group defends their respective end lines. The instructor call the numbers (or names) of one and/or two boys from each team. They attempt to kick the ball across the opponents end line. One team should have colored jerseys. (1/2 available time)

   b. **Dribble-Pass Relay:** Form three relay groups. The first boy in each line dribbles a distance of ten feet, traps the ball, turns and passes it back to the next boy in line. The competive relay continues. (1/4 available time)

   c. **Hot Ball:** This game is played in the same manner as the previous class hour. (1/4 available time)

Teaching Techniques: This is the day to demonstrate how to dribble the ball and such must be shown in a very simplified manner. Directions to keep the ball in front of the feet and to move it along with first one foot and then the other should be sufficient. To trap the ball, while moving, should also be demonstrated in elementary form and it should be permissible for the boy to simply corral the ball if necessary. Little emphasis should be placedon form, per se.

The second activity, although competitive will probably provide as much, if not more, interest for each group. This constitutes the initial experience for dribbling and one can expect the ball to go many places and perhaps even for minor "spills" to occur. The distance is only ten feet and if the ball does go wild the wall (five feet away) will serve as a bumper. The instructor should stand between the "turn-lines" to be certain that none of the boys forgets to stop and turn.

Line soccer should provide a good deal of spirited play activity, however, the instructor must keep it moving and on occasion may even call out three numbers (or names) from each group. The boys might ask whether or not they can use their hands to push another boy away and they should be told that the body, not the hands, is to be used for such purposes. Confusion will most certainly result if these boys are allowed to begin pushing their opponents.

Comments: (after conducting class program)

1. Some improvement was noted in the "straight-leg-stretcher" but it is difficult to keep the boys from stopping during this particular activity. The "trunk twister" was confusing to them and they had difficulty grasping the circular motion concept.

2. The order of the play-oriented activities might well be more effective if the "dribble-pass-relay", "hot ball" and then "line soccer" were presented. It is further recommended that equal time be given to each activity.

3. Line soccer went well with the boys and the calling of last names was more effective than using numbers. They do not remember numbers that well.

4. In the "dribble-pass-relay" dribbling proved to be very difficult, however, this deficiency is partially compensated for when the boy kicks the ball and then catches up to it. They enjoy the activity a great deal.

5. "Hot Ball" was again successful and a larger circle (as large as possible) was more advantageous.

Play-Oriented Program
Division II: Class III:

Class Organization: (and specific formations)

1. Roll call and personal inspection (line)
2. Warm-up activities (open)
3. Participation phase
    - Explanation-Demonstration (4-6 min.)
    - Organized play-type activity (22-28 min.)
        - a.(relay)
        - b.(defensive baseball)
4. Equipment and Supplies
    - a. 2 slightly deflated soccer balls
    - b. 8 colored jerseys

Time Allotment:
2--4 min.
4--6 min.
28-32 min.

Warm-up Activity: (Instructor and Student Lead)

1. Head, shoulders, knees and toes, (Follow the leader)
2. Trunk twister (1-4 count or verbal)
3. Straight-leg-stretchers
4. Sit-ups (from 12 to 14)

Participation Phase:

1. Objective:
   To present activities that generally require at least a minimal sufficiency in selected fundamental soccer techniques.

2. Explanation-Demonstration:
    - a. Dribbling-Shooting
    - b. Playing the goalie position

3. Organized Play-Type Activity:
    - a. Soccer Goal Kick: Each group occupies one-half of the floor area and lines up in relay formations. Two boys from each group then exchange with two from the other group and play the "goalie" positions. The first boy in each group begins by dribbling the ball from the center of the court to the goal area where he attempts to score a goal for his team (he will get only one attempt). Each goal counts one point. One group should have colored jerseys on so that unnecessary confusion does not exist. The instructor rotates two other boys into the "goalie" positions on a four-minute-interval basis. (1/2 available time)

    - b. Baseball Soccer: The bases (rubber or traffic cones) are set out in conventional fashion with a distance of twenty feet between each base. One of the groups takes the field and the game begins. The pitcher rolls the ball in via the shovel-type pass but all others including the catcher must utilize regular soccer techniques. The batter after propelling the ball with his foot attempts to run around the entire diamond and touch the home plate ahead of the rolling ball. The boys in the field attempt to get the ball to home plate ahead of the runner by conventional soccer techniques. The entire group should bat around before the side is retired. (An option depending on general abilities would be to abolish the pitcher and have the batter kick a stationary ball.) (1/2 available time)

Teaching Techniques: The initial activity includes the straight line dribbling experience of the previous class hour and adds to that an opportunity to score. It is important that each boy make the scoring attempt some distance from the goal. so that the possibility of "point blank" shooting does not materialize. The toe-type kick is to be allowed and this should be shown to the groups along with how a goalie can use his hands. Considerable leeway can be allowed in that success is as important to the goalie as it is to the shooter. The two goalies have a ten foot goal to protect and most balls should be kicked from approximately twelve feet away.

Baseball Soccer gives each boy an opportunity to perform for the others, allows good movement and does require some evidence of improved performance if many "put-outs" are to be realized. One can expect many points to be scored especially at the outset of this activity.

Comments: (after conducting class program)

1. "Head, shoulders, knees and toes," as it was in the beginning remained very popular with the boys. They also like to shout the words. Although the performances in the "straight-leg-stretcher" and the "sit-ups" showed slight improvement, those in the trunk twister generally did not. Much patience is required if this particular activity is to become successful for usage with the educable mentally retarded boy.

2. "Soccer Goal Kick" worked quite well despite the lack of detail regarding certain techniques. It was found that it is not necessary to make a specific issue of why two boys are taken from one team to be goalies against the other as the activity causes much self-motivation among the students.

3. In "Baseball Soccer" which did go well as an activity it is recommended that the catcher also be allowed to use his hands along with the pitcher. The option to exclude the pitcher did prove more beneficial at one school where there were fewer boys possessing a higher degree of educability.

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Play-Oriented Program
Division II: Class IV:

Class Organization: (and specific formations)		Time Allotment:
1. Roll call and personal inspection (line)		2--4 min.
2. Warm-up activities (open)		4--6 min.
3. Participation phase		28-32 min.
Explanation-Demonstration	(4-6 min.)	
Organized play-type activity	(22-28 min.)	
a.(relay-target)		
b.(defensive baseball)		
4. Equipment and Supplies		
a. 2 slightly deflated soccer balls		
b. 8 colored jerseys		

Warm-up Activity: (Instructor and Student Lead)

1. Head, shoulders, knees and toes
2. Scramble (verbal directions)
3. Trunk twister
4. Sit-ups (from 12 to 15)

Participation Phase:

1. Objective:
   To continue with play-type activities which reinforce the opportunity to learn and/or develop fundamental soccer techniques.

2. Explanation-Demonstration:
   Enrichment of previous soccer fundamentals

3. Organized Play-Type Activity:
   a. Soccer Goal Kick: This activity is a continuation from the previous class hour with the possibility that only one goalie be used. This decision should be made by the instructor based on the developmental level of the group. (1/2 available time)

   b. Baseball Soccer: This too is played in the same manner as the previous class hour. Soccer techniques are utilized in every instance with the exception of the pitcher who is allowed to roll the ball via the shovel-type pass. (The optional method mentioned during the previous class hour still exists; however, it is hoped that the boys can be exposed to the moving ball.) (1/2 available time)

Teaching Techniques: It should be carefully pointed out to the boys during the explanation-demonstration period that the inside-of-foot technique may be more effective in getting the ball to where it should go at close range. However, the usage of the toe-kick should not be resisted unless too many balls are being kicked into the air.

Baseball Soccer should utilize all of the individual fundamentals presented thus far and offer a good opportunity for many of them to be further developed through the medium of play-type activity.

It is believed, that at this point, some signs of grasping these fundamental techniques should be evident. However, surprise should not be expressed if certain boys fail to respond, expecially to any activity which involves dribbling.

Comments: (after conducting class program)

1. The "scramble proved to be another very popular warm-up activity and this along with the equally effective "heads, shoulders, knees and toes" seemed to help increase the level of performance in the "trunk-twister" and the "straight-leg-stretcher".

2. Both play-type activities which were utilized for the second consecutive class hour are highly recommended for usage with educable mentally retarded boys.

Play-Oriented Program
Division II: Class V:

Class Organization: (and specific formations)	Time Allotment:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Participation phase	28-32 min.
Explanation-Demonstration (4-6 min.)	
Organized play-type activity (22-28 min.)	
a.(circle)	
b.(team soccer)	
4. Equipment and Supplies	
a. 2 slightly deflated soccer balls	
b. 8 colored jerseys	

Warm-up Activity: (Instructor and Student Lead)

1. Head, shoulders, knees and otes
2. Scramble
3. Trunk twisters
4. Squat-thrusts (1-4 count)

Participation Phase:

1. Objectives:
   - a. To present play-type activities which provide further developmental opportunity in fundamental soccer techniques
   - b. To provide opportunity for concentrated team play

2. Explanation-Demonstration:
   - a. Close quarter passing
   - b. Enrichment of previous fundamentals

3. Organized Play-Type Activity:
   - a. Touch It If You Can: Form two circles with one boy in the center of each. He attempts to touch the ball as it is being passed around or through the circle area via the feet. The boy making the pass that was touched goes into the center and the activity continues. Each boy should have at least two opportunities to be in the center of the circle. (1/2 available time)

   - b. Simple Soccer: Each group (team) protects one-half of the play area. The goal line will be six feet from the wall and six feet wide. The ball must pass over the line if a point is to be awarded. Players other than the goalie can go anywhere on the floor except when a kick-off or penalty kick is occuring. There are to be no "out-of-bounds" balls unless one rolls out of the gymnasium or becomes lodged. Any violation results in a free penalty kick from a line ten feet from the goal line. Regular rules are to be observed concerning the kick-off following a successful point. Indian clubs may be substituted in place of the goalie at the discretion of the instructor. (1/2 available time)

Teaching Techniques: The explanation-demonstration session should center on close-quarter passing and trapping as these techniques are dominant in the initial play-type activity. It must be assumed that by this time the majority of boys will be able to trap the ball in some form or manner, although the one-foot technique should continually be emphasized.

The initial activity should produce adequate participation and enjoyment and may indicate generally, how well the students are progressing. Obviously the circle area should be enlarged slightly and perhaps the ball should be deflated even more so than it has been in the past.

Simple Soccer does, without doubt, present the most significant opportunity for competitive action to date. Outbreaks in terms of temper should not be unexpected and should be dealt with in a fair and impartial manner. It is hoped that this activity can be successful; however, much will depend on the developmental level of the boys.

Comments: (after conducting class program)

1. The "squat thrusts" were not as difficult for the boys this time and carry-over was evident. The "trunk-twisters" remain difficult and do contribute toward some individual student frustration.

2. In the initial play-type activity some boys did deliberately attempt to have the ball touched by the center-man so that they could get into that position. This can be remedied to some extent by having the instructor select a different boy each time.

3. "Simple Soccer" went moderately well and the difficulties which did occur appeared to be directly related to a lack of skill on the part of many. Despite this deficiency enthusiasm was good and the activity is recommended.

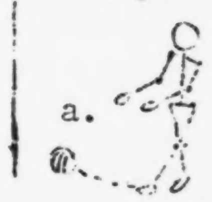
Play-Oriented Program
Division II: Class VI:

Class Organization: (and specific formations) Time Allotment:
1. Roll call and personal inspection (line) 2--4 min.
2. Warm-up activities (open) 4--6 min.
3. Participation phase 28-32 min.
    Explanation-Demonstration (4-6 min.)
    Organized play-type activity (22-28 min.)
        a. (relay)
        b. (team soccer)
4. Equipment and Supplies
    a. 2 slightly deflated soccer balls
    b. 8 colored jerseys

Warm-up Activity: (Instructor and Student Lead)
1. Head, shoulders, knees and toes
2. Side-straddle-hop (1-2 count or clap-slap)
3. Scramble
4 Squat-thrusts

Participation Phase:
1. Objective:
To further enrich and reinforce student development of soccer fundamentals through the medium of organized play-type activity.

2. Explanation-Demonstration:
a. Recovery of ball from wall
b. Enrichment of previous skills



3. Organized Play-Type Activity:
a. Wall Volley Relay: Form two relay groups. The first boy in each group dribbles (10 feet) to the next line (3 feet from wall) and volleys the ball of the wall three consecutive times. If the ball should bounce out of the area, the student may run and retrieve it by using his hands but must begin all over again. The ball is then passed to the next boy in line and the competitive relay continues. Tape lines are to be placed on the wall eight feet apart and the ball must be volleyed within the confines of these lines. (1/2 available time)

Simple Soccer: This is to be handled in the same manner as during the previous class hour with Indian clubs, in preference to a goalie, again being optional. (1/2 available time)

Teaching Techniques: The primary technique involved in the initial relay must be carefully demonstrated as the boys will be required to keep the ball within the designated confines or remain there until they do. Less leeway than usual should be allowed here as it is expected that they will be able to handle themselves in a more efficient manner at this point of their participation in the play-type activity.

Team competition is again inherent in the basic lead-up activity of "Simple Soccer". This contest should afford each boy the opportunity to further express himself in terms of individual development. The instructor should be certain that each of the boys are involved in the activity. If a goalie is being utilized several boys should get the opportunity to fill this slot assuming that they desire to do so.

Comments: (after conducting class program)

1. The "side-straddle-hop" like the "squat thrust" was handled quite well by the boys. The educable mentally retarded boys, at least those involved in this study, do seem to lack coordination and/or the attention to detail moreso than the so-called normal boys of the same chronological age. This is not to suggest that repeated practice under favorable conditions would not aid the retardate in his endeavor to improve coordination.

2. The only criticism of the "Wall Volley Relay" is that the boys move so fast in an effort to win that they sometimes forget what they are supposed to be doing. Such constitutes a drawback of a play-oriented program.

3. Despite some confusing incidents "Simple Soccer" is definitely recommended as a play-type activity for this type of student.

Play-Oriented Program
Division II: Class VII:

Class Organization: (and specific formations)

1. Roll call and personal inspection (line)
2. Warm-up activities (open)
3. Participation phase
   Explanation-Demonstration (4-6 min.)
   Organized play-type activity (22-28 min.)
      a.(circle)
      b.(random)
4. Equipment and Supplies
   a. 3 volleyballs
   b. 3 large circumference beachballs
   c. volley ball net, 6' hight
   d. 3 light-weight balls ** (see comments)

Time Allotment:
2--4 min.
4--6 min.
28-32 min.

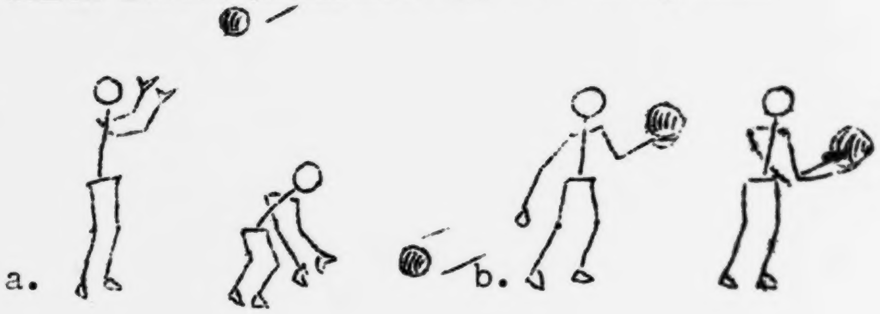
Warm-up Activity: (Instractor and Student Lead)

1. Side-straddle-hop
2. Scramble
3. Squat thrusts
4. Running in place (vary the pace)

Participation Phase:

1. **Objective:**
   To introduce play-type activities which involve fundamentals of volleyball.

2. **Explanation-Demonstration:**
   a. Volleying, (Using Beachballs!)
      from above waist
      from below waist
   b. Serving with the closed palm



3. **Organized Play-Type Activity:**
   a. **Keep It Up:** Form two circles (can use three groups). Several consecutive contests are held to determine which group is able to keep the ball in the air for the longest period of time (one boy can hit it more than once in succession). The groups then determine which is able to keep the ball up the most number of times by actual counting. The boys should count if possible and this should be done "out loud". (1/2 available time)

   b. **Fist Fungo:** Form two groups on either side of the net. One boy from each group stands on the opposite side of the net and serves the ball (a bounce may be allowed prior to the service attempt). A boy who catches the ball twice becomes the new server and the play-type activity will continue. Restrictions are not imposed as to where the server must stand but may be placed on the number of unsuccessful attempts. Competition between groups can be fostered if it is determined how many times each group changes the service in a give period of time. (1/2 available time)

Teaching Techniques: The explanation-demonstration period will have to be well planned to adequately cover the volleying and service techniques. These should be presented in a simple, yet clear manner. The importance of having the fingers pointed up or down must be stressed despite the fact that this may prove difficult for many of the boys to comprehend. The serving technique which calls for a stride-type stance with the ball being held away from the body at waist level, and utilizing the closed-palm approach must also be carefully shown.

While the play-type activities are self-explanatory much confusion may exist, especially in the initial "Keep It Up" contests. It is thought that the beachball should aid in giving the students added confidence in that these balls do take longer to come down thus giving the boy more time to prepare. Beachballs should not be used in serving thus both sets of balls must be on hand. The second activity introduces the net and also constitutes a review for passing and catching a large circumgerence ball.

Comments: (after conducting class program)

1. "Running in place" was again well accepted as a warm-up activity. This along with the other three scheduled during this class hour constitutes the most successful combination utilized thus far.

2. Much patience must be exercised in the "Keep-It-Up" activity as many of the boys do experience trouble even with beachballs. The demonstration is very important and it might well be given a second time if time permits.

3. It is recommended that boys be instructed where to stand and that they not be allowed to run just anywhere to attempt a catch during "Fist Fungo". Such action would allow every boy a better opportunity to be successful in catching the ball. Also thereis no reason, depending on the group involved, why two servers could not be used simultaneously.

** It was found that cheap balls purchased from a toy store, with a circumference similar to that of a volleyball, worked better than either a volleyball, playground ball, or larger beachball.

Play-Oriented Program
Division II: Class VIII:

Class Organization: (and specific formations) — Time Allotment:

1. Roll call and personal inspection (line) — 2--4 min.
2. Warm-up activities (open) — 4--6 min.
3. Participation phase — 28-32 min.
    - Explantion-Demonstration (4-6 min.)
    - Organized play-type activity (22-28 min.)
        - a. (circle)
        - b. (random)
        - c. (circle)
4. Equipment and Supplies
    - a. 3 volleyballs
    - b. 3 large circumference beachballs
    - c. 1 volleyball net, 6' high
    - d. 3 light-weight balls

Warm-up Activity: (Instructor and Student Lead)

1. Arm circles (start small, then large)
2. Side-straddle-hop
3. Windmill (give direction, 1-4 count)
4. Squat thrusts
5. Running in place

Participation Phase:

1. Objective:
   To continue involvement in play-type activities which include selected volleyball fundamentals.

2. Explanation-Demonstration:
    - a. Volleying (Using Volleyball!)
        - from above the waist
        - from below the waist
    - b. Serving
        - with closed palm
        - with fist

3. Organized Play-Type Activity:
    - a. Keep It Up: This activity is played in the same manner as during the previous class hour. Both variations should again be utilized. (1/3 available time)
    - b. Fist Fungo: This too is handled in the same manner as the previous day with the exception that the technique of serving with the fist may be utilized. (1/3 available time)
    - c. Touch It If You Can: Form two circles with one boy in the center of each. He attempts to touch the ball while it is being volleyed and/or passed within the circle. When a "touch" is made he changes places with the last boy to handle the ball. Each boy should have at least two opportunities during the course of the activity to be in the center of his circle. (1/3 available time)

Teaching Techniques: The same techniques that were demonstrated during the previous class hour should again be shown with the exception that the regular volleyball should be used. In addition the method of serving with the fist is to be shown with verbal comments as to its effectiveness.

Better performance is hoped for, however, it is not expected that the level of improvement will be anything outstanding. Certainly if performance is poor, the beachball or light-weight ball can be used in the first and third activities and/or the single bounce can be allowed prior to the attempted serve.

Each of the play-type activities should provide sufficient motivation and contribute to the realization of individual and group success.

Comments: (after conducting class program)

1. This was the class hour where five warm-up activities were included instead of the usual four. The students showed no signs of even realizing this but it did mean that the instructor had to be more aware of his available time.

2. The "windmill" was more easily grasped this time; however, the coordination involved in terms of proper direction was still a problem with a majority of the boys.

3. Because of the difficulty in handling the volleyball, especially during the initial play-type activity, individual success becomes very significant. For this reason the beachballs and/or light-weight balls were utilized where ever necessary.

4. "Fist Fungo" again proved to be quite interesting for the boys and certainly they were highly motivated through participation in this activity.

5. "Touch It If You Can" was not particularly successful nor is it believed that it would be even after considerable exposure. The major difficulty involved is maneuvering the ball or keeping it up. The along with the lack of detailed skill simply outweighs other positive factors.

Play-Oriented Program
Division II: Class IX:

Class Organization:(and specific formations)		Time Allotment:
1. Roll call and personal inspection (line)		2--4 min.
2. Warm-up activities (open)		4--6 min.
3. Participation phase		28-32 min.
Explanation-Demonstration	(4-6 min.)	
Organized play-type activity	(22-28 min.)	
a.(circle)		
b.(baseball)		

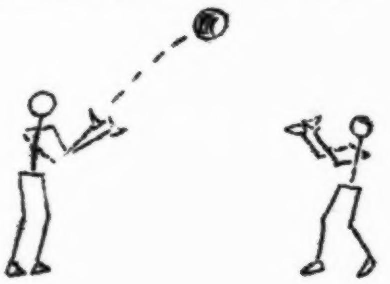
4. Equipment and Supplies
   - a. 3 volleyballs
   - b. 3 light-weight balls
   - c. 4 rubber bases or traffic cones

Warm-up Activity: (Instructor and Student Lead)
1. Arm circles
2. Side-straddle-hop
3. Windmill
4. Push-ups (regular, from 6 to 8 on ind.basis)
5. Running in place

Participation Phase:

1. Objective:
   To foster further development of volleyball fundamentals through the media of organized play-type activity.

2. Explanation-Demonstration:
   a. Passing the ball with some direction
   b. Serving the ball with direction

a.


3. Organized Play-Type Activity:
   a. Touch It If You Can: This activity follows the same pattern introduced during the previous class hour with the exception that the volleyball should be used with no exceptions. (1/2 available time)

   b. Volley Baseball: A regular diamond is laid out with the bases being twenty feet apart. The batter serves the ball and goes as far as he is able. The next batter follows, etc. The ball must get to the base ahead of the runner and the fielders are to handle the ball via conventional passing and catching techniques. The entire side should bat around before the side is retired. A ball that is caught automatically gives the batter first base. (1/2 available time)

Teaching Techniques: Although at first glance the explanation-demonstration would seem to be rather difficult for this type of student to grasp, such is not meant to be the case. The boys do have to be shown how to turn in order to pass the ball to another person and how by foot and/or hand adjustment the serve can be placed. It cannot be accepted here that these students need be only concerned with the "lock-step" concept of merely getting the ball over the net!

The activities would seem to be self-explanatory. Few rules should be inserted in the Volley Baseball activity other than those already stated. The unique fly-ball rule is included or the boys would more than likely serve the ball on the floor so that it could not be caught. If too much confusion results in having base runners the players should be required to make it all the way around before the ball is thrown back to home plate. If this option were inserted, it is recommended that the defensive team be required to make three successful passes before the ball can be thrown home.

Comments: (after conducting class program)

1. The regular "push-up" proved difficult for a majority of the boys but seemingly there were more efforts made than had been evident during the initial class hours when the "modified push-up" was involved. "Arm circles" in their second day seem to be successful only if the instructor is very careful in giving verbal directions as to how large the circles should become.

2. In demonstrating placement of the served ball, it is recommended that the instructor actually serve the ball to several key areas so that the student can more clearly visualize how it should be done.

3. Volley Baseball was effective as the boys were very interested in it as an activity. It did provide an ideal opportunity for team play and cooperative interaction not to mention the individual volleyball fundamentals involved.

Play-Oriented Program
Division II: Class X:

Class Organization: (and specific formations)

1. Roll call and personal inspection (line) — 2--4 min.
2. Warm-up activities (open) — 4--6 min.
3. Participation phase — 28-32 min.
    - Explanation-Demonstration (4-6 min.)
    - Organized play-type activity (22-28 min.)
        - a. (baseball)
        - b. (volleyball)
4. Equipment and Supplies
    - a. 2 volleyballs
    - b. 1 volleyball net, 6' high
    - c. 4 rubber bases or traffic cones
    - d. 2 light-weight balls

Time Allotment:
2--4 min.
4--6 min.
28-32 min.

Warm-up Activity: (Instructor and Student Lead)

1. Arm circles
2. Windmill
3. Lift em and spread em (verbal direction)
4. Push-ups (from 7 to 9 on ind. basis)
5. Running in place

Participation Phase:

1. Objective:
   To continue participation in play-type activities which generally require more efficient development of volleyball fundamentals.

2. Explanation-Demonstration:
    - a. Serving variations
    - b. Enrichment of previous techniques

3. Organized Play-Type Activity:
    - a. Volley Baseball: This activity is continued from the previous class hour. Additional rules should not be employed unless absolutely necessary. (1/2 available time)

    - b. One Bounce Volleyball: Each group (team) occupies one side of the net. As nearly as possible the players are to stand in a 3-1-3 formation. The boy in the back right-hand corner serves the ball either by a conventional technique or by first bouncing the ball and then serving it. The ball must hit the floor (once only) on the other side of the net before it can be played. It then must come back over the net without being caught or hitting the floor a second time. No limits are placed on the number of times a ball may be volleyed and/or passed about before it finally comes over the net. A point is scored when a team drops the ball or causes it to go out-of-bounds (be very lenient here) and the service alternates from one side to the other with only one opportunity being allowed for each boy. The rotation should be in a clockwise direction with the boy in the back left side position going to the center and the center going to the front left side position (1/2 available time)

Teaching Techniques: There is little doubt that the service techniques will again have to be demonstrated, perhaps completely. The open-palm method is to be shown and the chances are good that it may help some of the boys to become more successful.

Although several rules have been stated pertaining to "One Bounce Volleyball," they are quite simple with the possible exception of the rotation. Insistence as to definite formation should not be adhered to but suggestion concerning same is recommended. Assistance probably will have to be given on the rotation as this will occur quite often. Only one successful serve is allowed each student so that everyone will get the opportunity. The number of trials to get the ball over the net is optional and must depend on the level of the class.

Comments: (after conducting class program)

1. The same problems occured with the "lift em and spread em" activity that did previously. It is recommended that the boys "pat" their stomachs lightly. This innovation did provide motivation and helped to keep the legs at a lower height from the floor.

2. Volley Baseball is highly recommended as a play-type activity for the educable mentally retarded boy.

3. One-Bounce Volleyball can be successful if the game progresses at a fairly rapid pace. It is the responsibility of the instructor to keep the game moving. The boys like the challenges involved but will not wait long in one place without becoming at the very least, minor disciplinary problems.

4. That one-bounce rule (see above) was confusing and it is recommended that this be made optional instead. This would mean that the boy could let the ball strike the floor or he could hit it in the air as it came over the net.

Play-Oriented Program
Division II: Class XI:

Class Organization: (and specific formations)		Time Allotment:
1. Roll call and personal inspection (line)		2--4 min.
2. Warm-up activities (open)		4--6 min.
3. Participation phase		28--32 min.
Explanation-Demonstration	(4-6 min.)	
Organized play-type activity	(22-28 min.)	
a. (relay)		
b. (pepper)		
c. (team volleyball)		

4. Equipment and Supplies
   - a. 2 volleyballs
   - b. 2 light-weight balls
   - c. 1 volleyball net, 6' high

Warm-up Activity: (Instructor and Student Lead)

1. Arm circles
2. Windmill
3. Lift em and spread em
4. Push-ups (from 8 to 10 on ind. basis)
5. Rope jumping mimetics (alter the pace and the type of jump)

Participation Phase:

1. Objective:
   To present play-type activity, the success of which depends to a large degree on the achievement level of the individual students.

2. Explanation-Demonstration:
   Enrichment of fundamentals previously presented.

3. Organized Play-Type Activity:
   a. Wall Volley Relay: Form two relay groups. The first boy in each line steps to the restraining line and volleys the ball off of the wall. Following the third consecutive volley he catches the ball and hands it to the next boy in line who continues the competitive relay. If a boy loses control of the ball he must retrieve it and start over again. (1/3 available time)

   b. Pepper Pass Contests: Form two pepper formations. The group that can successfully complete passes and return-passes from the leader to each student in the semi-circle first is declared the winner. Rotation then occurs and the contests continue. Whether the leader will pass and/or volley the ball or simply toss it must be left to the discretion of the instructor. (1/3 available time)

   c. One-Bounce-Volleyball: This activity is played in the same manner as it was during the previous class hour. (1/3 available time)

Teaching Techniques: The "Wall Volley Relay" may reflect some interesting results and it could prove too difficult for some. More insistence on obeying the rules should be prevalent here than has been the case in the past.

The pepper pass contests offer a change of pace but also place more emphasis on the individual to perform within the realm of a play-type activity. The light-weight playground balls should be used if too much difficulty is evident.

The tempo in "One-Bounce-Volleyball" should increase over the previous class hour. The restrictions on serving should again be adhered to so that each boy gets the opportunity, at least twice, to be the important part of the operation. There is little doubt that the level of achievement concerning volleyball fundamentals will be evident in the activities that are presented.

Comments: (after conducting class program)

1. "Rope jumping mimetics" brought back a second time proved again to be extremely popular with the boys.

2. Both the "Wall Volley Relay" and the "Pepper-Pass" are effective play-type activities. Each is highly motivating and requires at least a limited degree of skill if much success is to be realized. However, in the relay the instructor should carefully point out to the students that the ball is to be volleyed and not caught or thrown!

3. "One Bounce Volleyball" is an activity that with more playing time allowed, could develop into a highly interesting and self-motivating play-type activity. A certain amount of frustration was apparent in that the fundamentals involved simply had not been developed to a high enough level.

Play-Oriented Program
Division II: Class XII:

Class Organization: (and specific formations) — Time Allotment:

1. Roll call and personal inspection (line) — 2--4 min.
2. Warm-up activities (open) — 4--6 min.
3. Participation phase — 28-32 min.
    - Explanation-Demonstration (4-6 min.)
    - Organized play-type activity (22-28 min.)
        - a. (pepper)
        - b. (relay)
        - c. (team volleyball)
4. Equipment and Supplies
    - a. 3 volleyballs
    - b. 3 light-weight balls
    - c. 1 volleyball net, 6' high

Warm-up Activity: (Instructor and Student Lead)

1. Arm circles
2. Wing-flapper (give direction, 1-4 count)
3. Lift em and spread em
4. Push-ups (from 9 to 10 on ind. basis)
5. Rope jumping mimetics

Participation Phase:

1. Objective:
   To introduce play-type activities which demand greater versatility of performance.

2. Explanation-Demonstration:
   Enrichment of previous fundamentals

3. Organized Play-Type Activity:
   a. Pepper-Pass Contests: These contests are handled in the same manner as the previous class hour. (1/4 available time)

   b. Wall Volley Relay: This play-type activity is conducted in the same manner as the previous class hour (1/4 available time)

   c. Simple Volleyball: The same 3-1-3 formation, rotation pattern and service area is utilized here that was outlined previously for "One Bounce Volleyball". The boy serving gets two chances to successfully serve the ball over the net without the preparatory bounce. He continues to serve as long as his team scores. The scoring procedure remains the same with a point being awarded to a team when the other one allows the ball to hit the floor, catches it, or causes it to go out-of-bounds. Again, the number of times a ball is hit on one side of the net does not matter. (1/2 available time)

Teaching Techniques: Although three play-type activities are scheduled it is thought that familiarity of formation and/or method of approach should help to offset the time disadvantage.

"Simple Volleyball," is akin to the one-bounce activity but is more advanced in terms of serving. Obviously this activity will demand more effective student performance. The instructor must stand ready to keep the contest moving and even to play on a team if necessary.

Comments: (after conducting class program)

1. The carry-over concerning the "wing flapper" activity was evident; however, it is still difficult for most of the boys to understand and/or remember the four distinct movements which are involved.

2. The first two play-type activities again went very well; however, the problem of the boys catching the ball instead of volleying it is still prevalent in both.

3. Simple Volleyball as it is described here was not highly successful for basically the same reasons that have already been given concerning "One-Bounce-Volleyball". Certainly this activity and volleyball, per se, could become reality for this type of student but a greater degree of exposure appears to be necessary.

Play-Oriented Program
Division II: Class XIII:

Class Organization:(and specific formations)

	Time Allotment:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open).	4--6 min.
3. Participation phase	28-32 min.
Explanation-Demonstration	(4-6 min.)
Organized play-type activity	(22-28 min.)

4. Equipment and Supplies
    - a. 1, 1" x 2" wooden frame with supports
    - b. 4, 12' balance beams
    - c. 1 volleyball net, 6' high
    - d. 4 volleyballs
    - e. 2 soccer balls

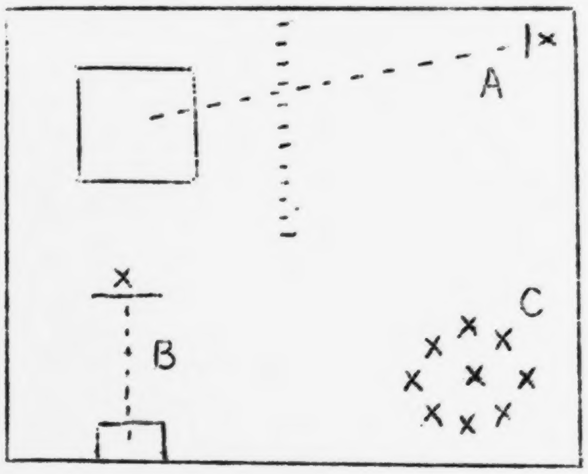
Warm-up Activity: (Instructor and Student Lead)

1. Wing -flapper
2. Rope jumping mimetics
3. Lift em and spread em
4. Push-ups (at least 10 on ind. basis)
5. Chu-chu train (treadmill, imitate sounds)

Participation Phase:

1. Objective:
   To present play-type activities which also allow opportunity for evaluation of student achievement.

2. Explanation-Demonstration:
    - a. Serving into the "hole"
    - b. Shooting at the "big eye"
    - c. Individual volley



3. Organized Play-Type Activity:
    - a. Serve Into The Hole: The boys in each group have three consecutive trials in serving from behind the regular service line (20 feet away from net). Each time the ball goes over the net the boy receives one point and if it drops into the "hole" (12' x 12' area) he is awarded two points. THE TOTAL POINTS FOR THE GROUP ARE RECORDED.

    - b. Continual Volley: Each boy within a group volleys the ball for as many times in succession as it is possible for him to do so (instructor will start it off by tossing ball directly above the students head). A point is awarded for each successful volley and again, the total number of points for the group are to be announced.

    - c. Big Eye: A rectangular wooden frame (2' x 4') is set out from the wall. Two boys stand on either side of the frame to retreive the balls while the others stand well back of the shooter. Each boy receives three consecutive trials, from a distance of fifteen feet, to shoot the ball through the eye. Two points are awarded for a successful trial and one is given should the ball ricochet off of the frame and not go into the eye area. The number of points for the group are to be totaled.

Note:

One of the two groups should serve while the other participates in the "Big Eye". The third activity is to be held following the completion of the others and with one group looking on while another is tested. The group compiling the largest point total will be declared the "winner". The instructor can choose, assuming that help is available, to test both groups at once in the individual volley. He may also choose to make each activity a contest rather than to utilize the all-in-one concept.

Teaching Techniques: It is believed that each of the play-type activities will be self motivating to the point that participation should be quite active. There is little question that the activity represents competition between groups for an entire class hour; however, the students should be able to adjust to such a situation by this time. The instructor will, of course, need some assistance during this hour. He must record the individual point totals and in addition is asked to make brief verbal insertions where necessary on the special evaluation form.

Comments: (after conducting class program)

1. The "chu-chu train" was well received. They enjoy verbally imitating a train while doing the activity. The "wing flapper" did seem somewhat improve over the previous class hour.

2. The competitive spirit was not as great among the two groups (teams) as it had been during the "obstacle course" held at the completion of the first division. It is believed that there was not enough real action involved here and that too much sitting around did occur. As it was reported in the skill-oriented evaluation, "Keep It Up" (with two hands) caused the most excitement on the part of the students while the soccer accuracy kick (Big Eye) seemed to be the least desirable as certainly the results were less than had been anticipated.

3. It was determined that using two hands must be required in the volleying contest. or an unfair advantage may occur concerning some of the boys.

H. Division III: Play-Type Activities Based on Various Fundamental Stunts, Tumbling and Apparatus:

1. Introduction: Division III, consisting of thirteen class hours began on April 15, at the Fernald School and on April 22, at the Wrentham School (variance in Easter vacations) and ended on May 20, with an evaluation via an obstacle course.

2. Program Changes, Additions and Deletions: The material below enumerates the specific changes, additions and deletions which were made following correspondence with the Jury, completion of the Pilot Study and final conferences with the Doctoral Committee. These revisions are incorporated into the class plans which appear in this division.

Play-Oriented Physical Education Program
Division III:

Changes, Additions and Deletions: Recommended By: J=Jury, C=Doctoral Committee and P=Pilot Study.

Class I:

Tumbling mats were eliminated as necessary items of equipment.(J)
The "frog leap" was inserted in place of the "rabbit hop". (P)

Class II: No Changes

Class III:

The "elaphant walk" was deleted. (P)

Class IV: No Changes

Class V:

Due to difficulty concerning skill and understanding the "three's over and under" were altered to "two's over and under".
"Log Rolling Relay" was added as a play-type activity. (P)

Class VI:

The alterations concerning the "over and under movement" were continued (P)

Class VII:

The "horizonatal stand" (doubles balance) was added to be used in conjunction with the "Sitting Balance Race" (P)

Class VIII:

The "horizontal stand" was inserted as a doubles balance to be utilized with the Doubles Balance Race. (P)
The formation for the Dive and Roll Relay was altered from that of a circle to a typical relay. (J---C)

Class IX:

The "horizontal stand"was again added as a doubles balance. (P)
The altered Dive and Roll Relay was conducted in the same manner. (J--C)

Class X:

"Pyramids:Can You Match Us was added as a play-type activity. (P)

Class XI:

The same change (see X) was made.(P)

Class XII: No Changes

Class XIII:

The "Skills Course" was renamed as the "Obstacle Course" (C)
The squat stand was deleted as the initial item of the "obstacle course" and the "seal crawl" was replaced by the "dog run". (P)

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3. Outline of Daily Class Plans: An outline of the daily class plans for Division III, appears on the next page.

Play-Oriented Physical Education Program
Division III:

Day:	Objectives:	Play-Type Activities:	Related Fundamentals:
1.	To present organized play-type activity which modifies selected basic stunts.	Animal Walk Parade Crab Walk One Base	Crab walks Dog Run Seal Crawl Frog Leap
2.	To continue participation in basic stunts, within a play-type setting which involves the individual student.	Animal Walk Parade Seal Crawl Circle Weave Animal Walk One Base	Enrichment Lame Dog Run Chicken Walk
3.	To increase the emphasis on individual performance and initiative in play-type activities which involve basic stunts.	Animal Walk Parade Chinese Get-up Wheel-Barrow Relay	Enrichment Chinese Get-up Wheel-Barrow
4.	To further develop individual initiative through play-type activities based on individual stunts.	Follow The Leader Chinese Get-up LogRolling Relay	Enrichment Heel Click Jump and Turn Mule Kick Rocker (ind.) Flat Rolling
5.	a.) To continue emphasis on individual initiative. b.) To introduce play-type activity based on fundamental tumbling techniques.	Follow The Leader Last Group Out Log Rolling Relay	Enrichment Heel Slap Coffee Grinder Jumping and Rolling
6.	To present further, tumbling and and balancing techniques applicable through selected play-type activity.	Last Group Out Shoulder Bal. Contest Forward and Backward Roll Circle Relay	Shoulder Balance Forward Roll Backward Roll
7.	To introduce more difficult fundamental balancing techniques through an organized play-type activity.	Forward and Backward Roll Circle Relay Squat Stand Circle Doubles Bal. Race	Enrichment Squat Stand Sitting Balance Horizontal Balance
8.	To increase emphasis on play-type activities based on generally more difficult tumbling and apparatus techniques.	Squat Stand Circle Doubles Bal. Race Dive and Roll Relay	Enrichment Dive and Roll
9.	To present experiences in semi-balancing and tumbling techniques which require more effective group interaction.	Doubles Bal.Get-up Pyramids:Can You Match Us Dive and Roll Relay	Enrichment Pyramid variations
10.	a.) To provide further opportunity for individual leadership and responsibility. b.)To introduce fundamental apparatus techniques through organized play-type activity.	Pyramids:Can You Match Us Follow The Leader	Beam variations Bar variations Rope Climbing lying to sit lying to stand hanging
11.	a.) To continue provision of opportunity for leadership. b.)To further enhance individual development of techniques relative to selected apparatus.	Pyramids: Can You Match Us Follow The Leader	Beam variations Bar variations Rope Climbing
12.	To reinforce student development of selected apparatus techniques.	Follow The Leader	Beam variations Bar variations Rope variations
13.	To evaluate students through a competitive activity which involved selected fundamental techniques.	Obstacle Course	Walk Raised Beam Dog-Run-Dive&Roll Log-Roll-Rope Swing JumpandTurn-Backward Roll-Crab Walk

Play-Oriented Program
Division III: Class I:

Class Organization: (and specific formations) — Time Allotment:

1. Roll call and personal inspection (line) — 2--4 min.
2. Warm-up activities (open) — 4--6 min.
3. Participation phase — 28-32 min.
    - Explanation-Demonstration (4-6 min.)
    - Organized play-type activity (22-28 min.)
        - a. (single file)
        - b. (teams)
4. Equipment and supplies
    - a. 1 slightly deflated soccerball
    - b. 2 rubber bases

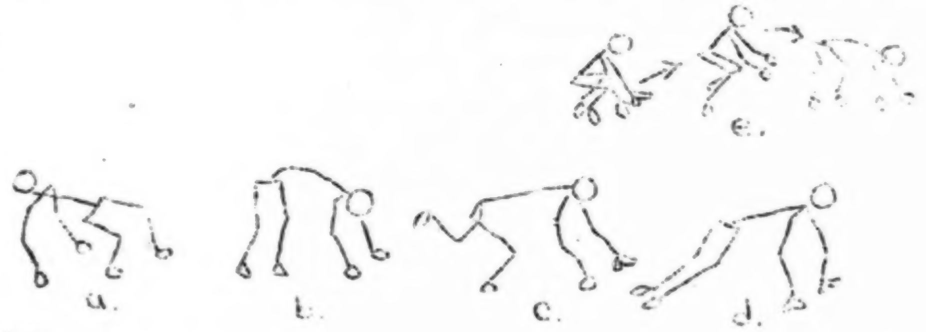
Warm-up Activity: (Instructor and Student Lead)

1. Wing flapper (1-4 count)
2. Rope jumping mimetics (alter the pace)
3. Windmill sitting down (have them grab their toes)
4. Lift em and spread em (pat stomachs lightly)
5. Chu-chu train (verbal)

Participation Phase:

1. Objective:
   To present organized play-type activity which modifies selected basic stunts.

2. Explanation-Demonstration:
    - a. Crab walk (forward)
    - b. Crab walk (backward)
    - c. Dog run (all fours)
    - d. Seal crawl
    - e. Frog leap



3. Organized Play-Type Activity:
    - a. Follow The Leader (Animal Walk Parade): Form two groups. The instructor begins by leading the entire class through the walks one time. A boy from each group then takes charge and leads his group. The leaders change at selected intervals but none of the boys should be forced into the leadership position. (1/2 available time)

    - b. Crab Walk One Base: One team is in the field while each member of the other team gets an opportunity to strike the ball and score. The pitcher stands normally and passes the soccer ball (via inside of foot kick) to the catcher who must stop the ball by trapping it. The batter attempts to strike the ball with the foot and upon doing so runs toward the base in front crab walk fashion (20 feet away), tags it, and attempts to return to home base via the reverse crab walk before the ball has touched it. The defensive team also in "crab position" must field the ball via soccer techniques and get it back to home plate ahead of the runner. Each boy on the offensive team gets the opportunity to strike the ball each inning. (1/2 available time)

Teaching Techniques: The animal walks are not particularly difficult to achieve but they do modify movement necessary in more difficult tumbling and apparatus techniques. Certainly there is nothing wrong with allowing the boys to make the sounds of the animals (mimicry). Attempt to steer the groups toward effective leadership to begin with and it may even be necessary to actually select the leaders as some of the boys will not be ready or capable.

In "Animal Walk One Base" (Crab Walk), the skills of soccer are combined with the animal walk which in this case is the crab walk. Such an activity it is believed should provide enrichment and much enjoyment for the boys.

It is thought that success can be attained through participation in these play-type activities.

Comments: **(After conducting class program)**

1. Warm-up: The innovation of having the boys grab their toes during the "windmill sitting down" is recommended.

2. Follow The Leader: Basically this play-type activity was well received. Leadership is all-important; however, and it is highly recommended that the instructor direct more capable boys into leadership roles especially during this first class hour.

3. Crab Walk One Base: This proved to be difficult for the fielding team to get the ball back to home plate in time. It is recommended that the length of the base path be increased or that only the batter be required to utilize the crab walk. It is interesting that there was far less mimicking of animal sounds evident here than in the skill-oriented program where "animal walks" were taught on a drill-type basis.

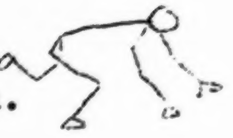
Play-Oriented Program
Division III: Class II:

Class Organization: (and specific formations) — Time Allotment:
1. Roll call and personal inspection (line) — 2--4 min.
2. Warm-up activities (open) — 4--6 min.
3. Participation Phase — 28-32 min.
   - Explanation-Demonstration (4-6 min.)
   - Organized play-type activity (22-28 min.)
     - a.(single file)
     - b.(circle)
     - c.(teams)
4. Equipment and supplies
   - a. 1 slightly deflated soccerball
   - b. 2 rubber bases

Warm-up Activity: (Instructor and Student Lead)
1. Wing flapper
2. Touch toes (hands from hips)
3. Rope jumping mimetics
4. Windmill sitting down
5. Chu-chu train

Participation Phase:
1. Objective:
   To continue participation in basic stunts, within a play-type setting, that involve the individual student

2. Explanation-Demonstration:
   - a. Lame dog run
   - b. Chicken walk

a.


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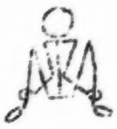

3. Organized Play-Type Activity:
   - a. Follow The Leader (Animal Walk Parade): See the plan for the previous class hour. Encourage each boy to be a leader and it is permissible to split into more than two groups if such is practical. (1/4 available time)

   - b. Seal Crawl Circle Weave: Form two circles. One boy in each circle is designated to begin the weave via the seal crawl technique. The circle that finishes first will be recognized as the best group of "seals". (1/4 available time)

   - c. One Base Animal Walk: This is a continuation of the activity from the previous class hour. The instructor designates which walk is to be utilized. It is permissible to have a different walk for each inning. (1/2 available time)

Teaching Techniques: Again, the animal walks comprise the basis of activity for the entire class period. As stated during the previous class hour, it is desirable to extend student leadership opportunity to as many who are willing and able to respond. However, under no circumstances should a boy be forced to act as leader, as the desire to do so should be self-motivating whenever possible.

It is expected that the explanation-demonstration period should also include those stunts demonstrated during the previous class hour. It is important that these boys see "how" these stunts are performed properly. Mistakes from the previous class hour can also be pointed out.

Comments: (**After conducting class program)**

1. Warm-up: The "wing-flapper" does cause the boys some difficulty as they have trouble with the coordinated movements involved. Definite carry-over was noticed concerning the "touch toes" activity which is included again after being introduced during the first division.

2. Seal Crawl Circle Weave: This is practical only if most of the boys are capable of the skill involved. In this case some boys were incapable and substituted the ordinary "all fours crawl". The excitement ran very high and "speed" rather than effective crawling became the dominant factor.

3. Animal Walk One Base: It was found that the boys generally become easily confused when the instructor changes the type of walk too often. Other than this, the activity was successful and is recommended.

Play-Oriented Program
Division III: Class III:

Class Organization: (and specific formations) — Time Allotment:

1. Roll call and personal inspection (line) 2--4 min.
2. Warm-up activities (open) 4--6 min.
3. Participation phase 28-32 min.
    - Explanation-Demonstration (4-6 min.)
    - Organized play-type activity (22-28 min.)
        - a.(single file)
        - b.(circle)
        - c.(relay)
4. Equipment and supplies
    - a. 4 tumbling mats (5' x 10' x 2")

Warm-up Activity: (Instructor and Student Lead)

1. Wing flapper
2. Touch toes
3. Windmill sitting down
4. Bicycle and kickover (take some time and press them to do both)
5. Chu-chu train

Participation Phase:

1. Objective:

   To increase the emphasis on individual performance and initiative in play-type activities which involve basic stunts.

2. Explanation-Demonstration:
    - a. Enrichment (animal walks)
    - b. Chinese Get-up
    - c. Wheel-barrow mimetics

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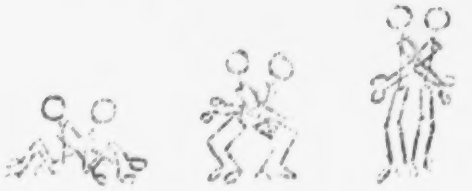

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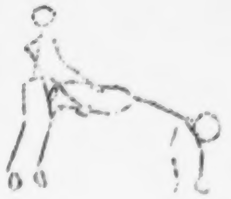


3. Organized Play-Type Activity:
    - a. Follow The Leader (Animal Walk Parades): The same procedures are followed as during the previous two class hours. Again, groups may be re-divided if leadership is ample. (1/3 available time)

    - b. Chinese Get-up: Form two circles and re-divide into couples. Upon a signal each pair of boys, from a sitting position, will brace themselves and attempt to move to an upright position. The group whose couples finish first is declared the winner. Odd boys should help where necessary and exchange with one of the others prior to the next contest. (1/3 available time)

    - c. Wheel-Barrow Relay: Form two relay groups. When the signal is given to begin the activity, the first couple in each line forms the wheel-barrow and moves toward the turn-line (only 10 feet away), whereupon they reverse positions and return, tagging the next two boys in line. The competitive relay continues. (1/3 available time)

Teaching Techniques: Even though this is not the final opportunity for boys to actively lead a group, particular efforts should be made to have those who have been reluctant to lead, do so, as these stunts are generally easier to direct than those which follow.

Although the "Chinese Get-up" represents competitive action, much of this may be offset by the fun and excitement involved in the activity. Direction is necessary to be reasonably certain that the partners are somewhat evenly matched. If serious difficulty should result, one boy can be allowed to brace his feet against the wall. If this is allowed be certain that each pair have the same opportunity.

To facilitate time, the same pairs could be involved in the relay but this should not be insisted upon. Notice too, that the relay distance is only ten feet in length to help insure that each boy probably can succeed. Tumbling mats should be used for the "Wheelbarrow Relay" and can be utilized in the "Chinese Get-up."

Comments: (After conducting class program)

1. Warm-up: There was apparent improvement noted in the ability of the boys to prop their hands under the hips in the "bicycle." The "kickover" portion was still more successful as they enjoyed contacting the floor with their toes.

2. Follow The Leader: The boys definitely were performing the "animal walks" more effectively and the majority of them had voluntarily been leaders. Some of them, of course, still refused to lead or even participate for that matter. This play-type activity is definitely recommended.

3. Chinese Get-up: It is believed that this contest may be more effectively utilized if the couple is judged on quality rather than the first to finish. If one of the two boys is having a great deal of trouble it is recommended that he be able to face a wall so that the feet may be braced.

4. Wheel-Barrow Relay: Lack of upper arm strength played an important role even when the distance was only ten feet. The motivating factors of this activity were excellent and the distance to the "switch line" can easily be altered to accommodate a particular group of boys.

Play-Oriented Program
Division III: Class IV:

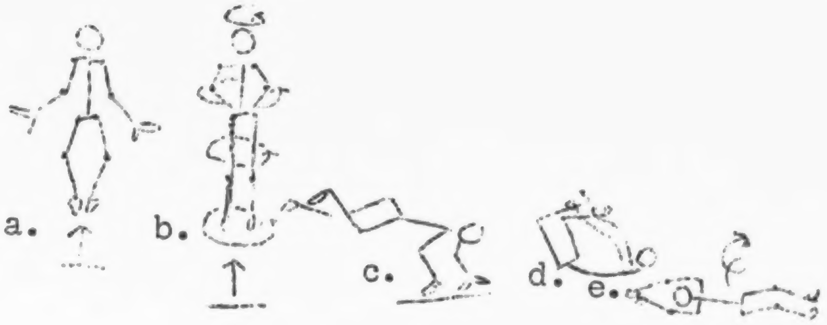
Class Organization: (and specific formations)
1. Roll call and personal inspection (line)
2. Warm-up activities (open)
3. Participation phase
   - Explanation-Demonstration (4-6 min.)
   - Organized play-type activity (22-28 min.)
      - a.(pepper)
      - b.(circle)
      - c.(relay)
4. Equipment and supplies
   - a. 4 tumbling mats (5' x 10' x 2")

Time Allotment:
2--4 min.
4--6 min.
28-32 min.

Warm-up Activity: (Instructor and Student Lead)
1. Touch toes
2. Kneebends (1-2 count with arms straight out)
3. Windmill sitting down
4. Bicycle and kickover (should contact floor at least twenty times)
5. Chu-chu train

Participation Phase:
1. Objective:
   To further develop individual initiative through play-type activity based on individual stunts.

2. Explanation-Demonstration:
   - a. Heel click
   - b. Jump and turn
   - c. Mule kick
   - d. Rocker (individual)
   - e. Log rolling



3. Organized Play-Type Activity:
   a. Follow The Leader: Form two pepper groups. Each boy in a group is given the opportunity to lead, utilizing the individual stunts that were demonstrated earlier. The instructor rotates the leaders and it is permissible to re-divide the groups if competent leadership is available. (1/2 available time)

   b. Chinese Get-up: Follow the same procedures as the previous class hour. (1/4 available time)

   c. Log Rolling Relay: Form two relay groups. The first boy in each group drops to the mat and rolls to the stop line (a rolled mat). He then rolls back until contact is made with the next boy in line. The relay continues until a winner is declared. (1/4 available time)

Teaching Techniques: In demonstrating the individual stunts much enthusiasm ought to be evident on the part of the instructor. Leading a group in individual stunts probably will be slightly more difficult than it was with the animal walks. The leader must face his group and perform so that they can repeat the stunt for him. The instructor should be on hand to suggest stunts which are being overlooked, although the emphasis is on enjoyment, leadership and followership, not perfection of the stunts.

The log rolling relay affords the boy his first real contact with the mat and has him rolling both ways. If this proves to be impractical, they can be allowed to run back instead of rolling in both directions. The runway is, however, quite short and this should aid the boy in achieving his goal. The boys should be cautioned to roll with their knees flat and with their arms outstretched over the head.

Comments: **(After conducting class program)**

1. Warm-up: No comments.

2. Follow The Leader: This play-type activity was not as successful when individual stunts and the pepper formation were utilized. Some of the boys simply could not bring themselves to lead the group and a problem of disciplinary order did occur while they were standing around waiting to follow their leader.

3. Chinese Get-up: This activity did improve but a real problem exists in terms of pairing the boys and having to confuse group membership to do so.

4. Log Rolling Relay: This met with a great deal of excitement and presented no serious problems. Numerous boys did experience difficulty in rolling straight on the mat but when this did occur there was much good natured laughter involved. It was found too that a boy can roll both directions and this is recommended.

Play-Oriented Program
Division III: Class V:

Class Organization: (and specific formations)		Time Allotment:
1. Roll call and personal inspection (line)		2--4 min.
2. Warm-up activities (open)		4--6 min.
3. Participation phase		28-32 min.
Explanation-Demonstration	(4-6 min.)	
Organized play-type activity	(22-28 min.)	
a.(pepper)		
b.(relay)		
c.(couples)		
4. Equipment and supplies		
a. 4-6 tumbling mats (5' x 10' x 2")		

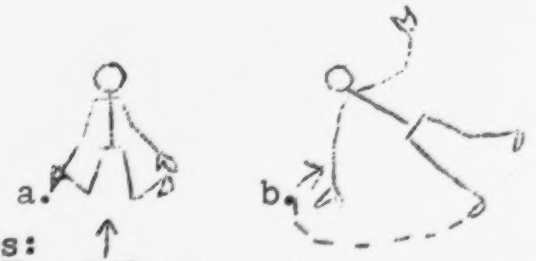
Warm-up Activity: (Instructor and Student Lead)

1. Touch toes
2. Kneebends
3. Windmill sitting down
4. Bicycle and kickover
5. Situps (Test-fashion with partner holding the ankles)

Participation Phase:

1. Objectives:
   a. To continue emphasis on individual initiative
   b. To introduce play-type activities based on fundamental tumbling techniques

2. Explanation-Demonstration:
   a. Heel slap
   b. Coffee grinder
   c. Twos, over and under



3. Organized Play-Type Activities:
   a. Follow The Leader: This is conducted in the same manner as the previous class hour. The heel slap and the coffee grinder are added to the list of possibilities. (1/2 available time)

   b. Log Rolling Relay: This is conducted in the same manner as the previous class hour. (1/4 available time)

   c. Two's, Over and Under (Last Group Out): The boys form in couples and spread out on the mats. At the signal they begin a series of rolls. To begin with, the instructor should select those couples that look the best and then it should be the couple that continues to roll for the longest period of time. Difficulty can be expected here and only minimal success should be recognized. (1/4 available time)

Teaching Techniques: It will be interesting to note the carryover from the previous class hour concerning the performance of the individual stunts. The two new stunts offer a better variety for the leaders and success should be evident in varying degrees.

The "Two's, Over and Under," although somewhat strenuous should provide much enjoyment for the boys. Some care should be taken to guard against frustration and a superior couple might well be split-up especially if there are others who cannot seem to get rolling properly. The boys must be told to keep the knees flat while rolling. Surprise should not be expressed if difficulty does occur in this particular activity as it does require each boy to roll and/or jump at a given moment. Do not expect top-quality jumping and rolling.

The "Log Rolling Relay" again offers a good change-up for the boys and should be an activity in which most can succeed.

Comments: (After conducting class program)

1. Warm-up: The boys were far more enthused about doing the regular "sit-ups" rather than the modified version (arms outstretched above the head) which had been introduced earlier in the program.

2. Follow The Leader: The "coffee-grinder" was somewhat difficult for many of the boys especially when they were not allowed to practice or receive individual instruction.

3. Two's Over and Under (Last Group Out): This activity provided a great deal of "fun" for the boys, and they enjoyed the competitive aspects as well. The quality was not good but this is to be expected in this type of program.

4. Log Rolling Relay: Again this was a highly successful activity. There was improvement noted in individual rolling abilities and this indicated that the boys were gaining more than just a good time.

Play-Oriented Program
Division III: Class VI:

Class Organization: (and specific formations)	Time Allotment:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Participation phase	28-32 min.
Explanation-Demonstration (4-6 min.)	
Organized play-type activity (22-28 min.)	

a.(couples)
b.(semi-circle)
c.(circle)

4. Equipment and supplies
   a. 4-6 tumbling mats (5' x 10' x 2")

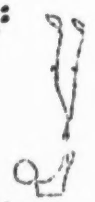
Warm-up Activity: (Instructor and Student Lead)

1. Touch toes
2. Kneebends
3. Bicycle and kickover
4. Sit-ups (from 10 to 12)
5. Straight-leg-stretcher (using same partner have him stand back of other boy to see if pusher can grab his hands)

Participation Phase:

1. Objective:
   To present further, tumbling and balancing techniques applicable through selected play-type activities.

2. Explanation-Demonstration:
   a. Shoulder stand balance
   b. Forward roll
   c. Backward roll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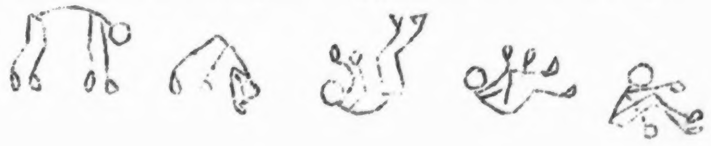
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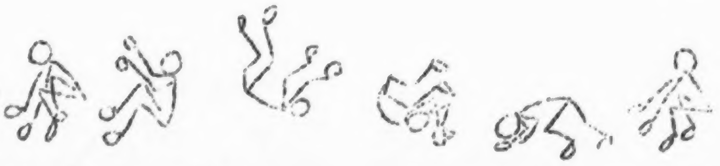
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3. Organized Play-Type Activities:
   a. Two's, Over and Under (Last Group Out): This is carried on in contest form, as it was during the previous class hour. (1/4 available time)

   b. Shoulder Balance Contest: Form two semi-circles on mats. The boys, upon a signal, "go up" into a shoulder balance. The instructor selects the group that shows the best form and another time selects the group that has the most boys up without any real consideration for form. (1/4 available time)

   c. Forward and Backward Roll Circle Relay: Form two circles. One tumbling mat is placed perpendicular to the line of the circle. Each boy, in turn, does a forward roll into the center of the circle and a backward roll to his original position. When the boy completes the two rolls the circle rotates once to the right and the relay continues. An assistant can be utilized for each circle if this is found to be necessary. (1/2 available time)

Teaching Techniques: The shoulder balance, although quite simple, may prove troublesome for some. Because of the importance attached to the group performace and not on the individual boy, inability to perform does not have to be emphasized. Each boy will, no doubt, be more engrossed in doing his own part and will not, it is hoped, worry about the inabilities of others. It is expected that success may be highly evident and rewarding in this competitive activity.

In the forward and backward roll, one of each is required in the circle relay. Depending upon the group, a decision will have to be made whether or not a spotter or assistant should be used, especially on the initial trial. The spotter would help to steer the student and if necessary give him enough help so that he can succeed.

Comments: (After conducting class program)

1. Warm-up: It was thought that to have one boy stand slightly behind another to force him to reach back and touch would constitute an effective motivating device in the "straight-leg-stretcher." This was not true, however, as only those boys who wanted to do it properly did so.

2. Two's Over and Under (Last Group Out): There was individual improvement noted and the contests progressed well. To select the best looking couple, from the standpoint of mechanics involved, seemed to be more acceptable to the boys than attempting to determine who rolled the longest time without a mistake. There was not as much individual frustration involved as had been anticipated earlier.

3. Shoulder Balance Contests: The shoulder balance was so easy for some and so difficult for others. The same problem existed here that did with the "bicycle. They had trouble getting the hands under the hips and holding the body erect with the weight primarily on the shoulders.

4. Forward and Backward Roll Circle Relay: Some of the younger boys did need a helping push to get them over. For this reason, and so that the instructor can spot, it is recommended that a single circle be formed. The group could compete against its own time (i.e. the first time around it may take 92 seconds, the second time may be cut to 68 seconds).

Play-Oriented Program
Division III: Class VII:

Class Organization: (and specific formations) — Time Allotment:

1. Roll call and personal inspection (line) — 2--4 min.
2. Warm-up activities (open) — 4--6 min.
3. Participation phase — 28-32 min.
   Explanation-Demonstration (4-6 min.)
   Organized play-type activity (22-28 min.)
      a.(circle)
      b.(circle)
      c.(small groups)
4. Equipment and supplies
   a. 4-6 tumbling mats (5' x 10' x 2")

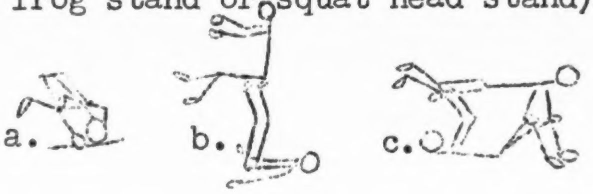
Warm-up Activity: (Instructor and Student Lead)

1. Head, shoulders, knees and toes
2. Kneebends
3. Bicycle and kickover
4. Sit-ups (from 12 to 15)
5. Straight-leg-stretchers (continue to use partners)

Participation Phase:

1. Objective:
   To introduce more difficult fundamental balancing techniques through an organized play-type activity.

2. Explanation-Demonstration:
   a. Squat stand (sometimes called frog stand or squat head stand)
   b. Sitting balance (doubles)
   c. Horizontal stand (doubles)



3. Organized Play-Type Activity:
   a. Forward and Backward Roll Circle Relay: This relay is conducted in the same manner as the previous class hour. The instructor determines whether or not spotting is necessary during the relay. (1/3 available time)

   b. Squat Stand Circle: The two groups form (on mats) circles. When the signal is given, all boys attempt the squat stand. The instructor selects the best group on the basis of how many boys are achieving the balance (even partially). The next time he selects the group that "looks the best" in terms of form. The contests continue. (1/3 available time)

   c. Sitting Balance and Horizontal Stand Race: Form groups of three. One boy is a spotter while the other two attempt one of the doubles balances. On the next attempt one of the others serves as the spotter. When the signal is given, each group attempts to get into the doubles balance as quickly as possible, and the first one to achieve it is recognized. The instructor may also select the "best looking" group in terms of form and such an interpretation can be based on very minimal standards. The modified sitting balance can be utilized if too much difficulty does occur with the other. In the modified sitting balance, the hands are not dropped. (1/3 available time)

Teaching Techniques: It is almost a certainty that the forward and backward roll will have to be carefully demonstrated again as many mistakes from the previous day may tend to frustrate some of the boys. The same circle relay activity should aid them in that a new activity does not have to be absorbed.

The squat stand (with the head on a mat and elbows on inside of knees) is being introduced here instead of the squat balance because the forehead can rest on the mat thus offering the boy some needed support. Success probably can be recognized here rather quickly as the boy need only to hold the balance for an instant.

The sitting doubles balance and the horizontal stand balance both ought to offer a real challenge to the boys. In the former the third boy should help out so that the top boy does not fall. If the modified version is used (do not drop hands) the third boy is not as necessary. The success of the horizontal stand depends primarily on whether or not the boy on top can support his own weight by sufficiently straightening his arms.

Comments: **(After conducting class program)**

1. Warm-up: The momentum from two very popular activities (head, shoulders, knees and toes and scramble) carried over to the others. There is much to be said for using so-called "popular" warm-up activities in conjunction with some of those that are considered difficult by the boys.

2. Forward and Backward Roll Circle Relay: The same recommendation is made here concerning this relay as was stated previously. It is significant, however, that progress in this play-type activity was much better during this class hour.

3. Squat Stand Circle: The boys had great difficulty in grasping the concept of the elbows and knees. Without an opportunity for practice and/or personal instruction, it was obvious that this situation probably would not show any marked improvement.

4. Sitting Balance and Horizontal Stand Race: These balances by contrast progressed extremely well in the competitive play-type setting and much fun was had by the boys. The third boy, particularly during the "horizontal stand", had little to do and thus minor discipline problems did occur.

Play-Oriented Program
Division III: Class VIII:

Class Organization: (and specific formations)
1. Roll call and personal inspection (line)
2. Warm-up activities (open)
3. Participation phase
    - Explanation-Demonstration (4-6 min.)
    - Organized play-type activity (22-28 min.)
        - a.(circle)
        - b.(small groups
        - c.(relay)
4. Equipment and supplies
    - a. 6-8 tumbling mats (5' x 10' x 2")

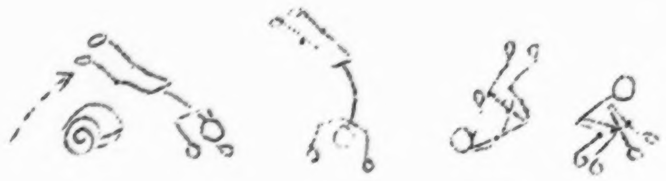
Time Allotment:
2--4 min.
4--6 min.
28-32 min.

Warm-up Activity: (Instructor and Student Lead)
1. Head, shoulders, knees and toes
2. Scramble (avoid going from feet to back)
3. Kneebends
4. Sit-ups (from 15 to 17)
5. Straight-leg-stretchers (partners are optional)

Participation Phase:
1. Objective:
   To increase emphasis on play-type activities based on generally more difficult tumbling and balancing techniques.

2. Explanation-Demonstration:
   - a. Enrichment of previous skills
   - b. Dive and roll (over rolled mat)

b.



3. Organized Play-Type Activity:
   - a. Squat Stand Balance: This activity is carried on in the same manner as the previous class hour. Competition in terms of "best form" should be increased. (1/4 available time)

   - b. Sitting Balance Race: This play-type activity is also handled in the same manner as the previous class hour. Emphasis should be on the true balance if possible and not the modified form. (1/4 available time)

   - c. Dive and Roll Relay: Form two relay groups. The first boy in each group dives and rolls over a rolled mat which is almost directly in front of him. He regains his feet, runs and touches the edge of the mat and then returns to tag the next boy in line. The competitive relay continues. (1/2 available time)

Teaching Techniques: It is almost a certainty that the squat stand and the doubles balances will have to be demonstrated again. Visual correction of mistakes made previously is recommended as the most effective manner of approach.

In demonstrating the dive and roll, it is important that it be shown in the same manner in which the boy will be attempting it only minutes later. This includes a one-foot step off with hands contacting the mat, to be followed by a forward roll. The knees must be kept close to the body so that the landing will not result in a "slam."

When the relay begins it should be kept in mind that this is the first time that many of these boys have ever attempted this and perhaps lesser emphasis should be placed on "winning" the first time through.

The instructor should spot at one mat and the regular teacher at the other. The boys should be given only enough assistance through spotting so that they will get over the rolled mat safely. Improvement should be noted during the second or third time the relay is conducted. There appears to be little question that success in this play-type activity will bolster the boy's ego considerably.

Comments: (After conducting class program)

1. Warm-up: Aside from the "straight-leg-stretchers" which improved very little over the previous class hour, the other activities were each performed in a satisfactory manner.

2. Squat Stand Balance: This continued to be frustrating to at least half of the boys. They wanted to be successful in terms of the contest but simply could not be.

3. Sitting Baland and Horizontal Stand Race: The doubles balances both in terms of the race and/or best form showed improvement. They obviously enjoyed the spirit of the activity.

4. Dive and Roll Relay: This represented a true challenge and with few exceptions the boys did attempt it willingly. The results could not be called gratifying in terms of form but certainly there was evidence of learning by doing and it was an enjoyable activity for them. Spotting very definitely was necessary during this relay and such can be achieved without giving individual instruction.

Play-Oriented Program
Division III: Class IX:

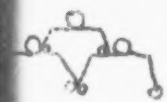
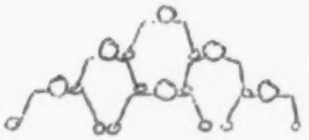
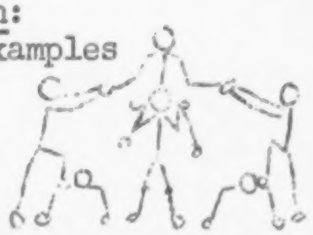
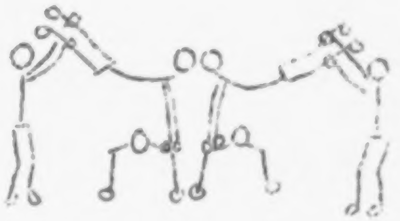
Class Organization: (and specific formations)
1. Roll call and personal inspection (line)
2. Warm-up activities (open)
3. Participation phase
   - Explanation-Demonstration (4-6 min.)
   - Organized play-type activity (22-28 min.)
     - a. (small groups)
     - b. (teams)
     - c. (relay)
4. Equipment and supplies
   - a. 8 tumbling mats (5' x 10' x 2")

Time Allotment:
2--4 min.
4--6 min.
28-32 min.

Warm-up Activity: (Instructor and Student Lead)
1. Head, shoulders, knees and toes
2. Scramble
3. Sit-ups (from 17 to 20)
4. Straight-leg-stretchers (partners are optional)
5. Squat thrusts (1-4 count)

Participation Phase:
1. Objective:
   To present experiences in semi-balancing and tumbling techniques which require more effective group interaction.

2. Explanation-Demonstration:
   Pyramid techniques and examples

3. Organized Play-Type Activity:
   a. Doubles Balance Get-up: Utilizing a solid block of mats, the groups of three attempt to build whichever balance has been designated. The competitive technique varies from the previous class hour in that each group which completes their balance within 25-30 seconds is recognized. This does not mean that partial balances should not be acknowledged. (1/4 available time)

   b. Dive and Roll Relay: This is conducted in the same manner as the previous class hour. Instead of touching the end of the mat, the boy runs a distance of thirty feet, tags a chair or cone and then runs back to tag the next boy in line. (1/4 available time)

   c. Pyramids: Can You Match Us: Form two teams. The instructor aids one team in building a simply pyramid (see above) while the others look on. The second team, without any assistance (unless absolutely necessary) other than spotting, then attempts to match it. The process is then reversed and the activity continues. In all, four very simple pyramids may be built and hopefully matched. (The suggested pyramids are sketched above, in the explanation-demonstration section.) (1/2 available time)

Teaching Techniques: A slight deviation from usual procedure, in pyramid building, is evident with the thought that some direction must accompany the original building if success is to be possible. The "match me" concept should motivate the boys and cause some good natured competition. If pyramids are to be appreciated by boys an audience should be present and the team that is watching constitutes this necessary element. Applause for the performance of a team should be encouraged.

In demonstrating the pyramid building one should emphasize that the knees are to be placed in the small of the back. Also it is highly recommended that these boys not be allowed to "roll" or "pancake" as a means of dissolving the pyramid. The top rows should be helped off, and the second row can jump backward to the floor.

Comments: **(After conducting class program)**

1. Warm-up: Additional motivation is necessary in getting the boys to complete at least twenty sit-ups.

2. Sitting Balance and Horizontal Stand Race: That these boys like to be winners was clearly demonstrated during the contests and improvement was again evident over previous performances.

3. Dive and Roll Relay: Performances were definitely improved and the greater running distance did add more zest to the contest. Such an innovation is recommended as the boy having great difficulty with the dive and roll may be able to compensate for this in his running ability.

4. Pyramids: Can You Match Us: Generally the pyramid building was well accepted and the boys, for the most part, did grasp the "match" concept. The time allotments were not adequate for four basic patterns and it is recommended that at least one entire class hour be allowed when these are to be introduced. Much explanation is necessary beforehand on where the knees are to be placed and how tha hands are to slightly grasp the shoulder area.

Play-Oriented Program
Division III: Class X:

Class Organization: (and specific formations)	Time Allotment:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Participation phase	28-32 min.

Explanation-Demonstration (4-6 min.)
Organized play-type activity (22-28 min.)
a. (stations)
b. (teams)

4. Equipment and supplies
   - a. adequate mats
   - b. at least one horizontal bar
   - c. 2 balance raised beams
   - d. at least one climbing rope

Warm-up Activity: (Instructor and Student Lead)

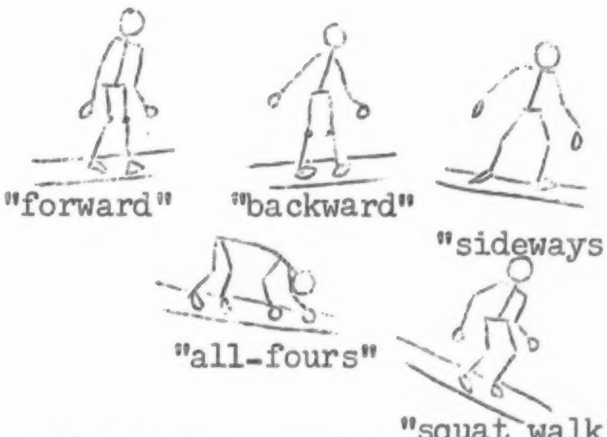
1. Head, shoulders, knees and toes
2. Scramble
3. Side straddle hop (1-2 count)
4. Straight-leg-stretchers (partners are optional)
5. Squat thrusts

Participation Phase:

1. Objectives:
   - a. To provide further opportunity for individual leadership and responsibility.
   - b. To introduce fundamental apparatus techniques through organized play-type activity.

2. Explanation-Demonstration:
   - a. Balance beam
     - forward walk
     - backward walk
     - walk sideways on beam
   - b. Horizontal ba
     - hang-drop
     - rail walk
     - leg raisers
   - c. Climbing rope
     - lying to sit
     - lying to stand
     - hanging

"Beam Sketches"



3. Organized Play-Type Activity:
   - a. Follow The Leader: Form three teams. The boys on each team will have the opportunity to lead the others during that team's stay at each of the three stations. They rotate to the next station at the direction of the instructor. It is recommended that the instructor steer some of the least developed boys into a leadership capacity initially so that success can be realized and, therefore, possibly motivate the boy to apply himself. (3/4 available time)

   - b. Pyramids: Can You Match Us: The same procedure is repeated from the previous class hour. One team builds a pyramid and the other attempts to match it. (1/4 available time)

Teaching Techniques: It is believed that the station methods will be workable and provide a basis for much personal development and enjoyment for the boys. A good deal of laughter may be evident as each boy attempts to follow his leader and certainly this should not be discouraged. The instructor should be quick, however, to cut short any potentially dangerous situation which may occur.

Boys may ask how a particular technique is to be performed and the instructor should comply with a brief demonstration. The boys are not, however, to be helped individually by the instructor.

Comments: (After conducting class program)

1. Warm-up: The carry-over of an earlier activity was quite evident in terms of how well the boys performed the "side-straddle-hop."

2. Follow The Leader: This method of organization worked quite well with these boys and they did enjoy the apparatus work. The horizontal bar gained the most attention while the boys performed more than adequately on the balance beams. Carry-over from Division I was highly evident concerning these activities. It was more difficult for them to comprehend the rope situation and again the lack of individual instruction was quite evident.

3. General: Although the method of organization was effective it is recommended that only two stations be utilized at one time. This would allow the instructor to have better coverage and probably would aid in decreasing the amount of confusion. Too, the instructor must stay close to the group activity on the horizontal bar and such would not allow him to do the same concerning the climbing ropes.

4. Pyramids: Can You Match Us: It was gratifying that at one school it was not necessary for the instructor to re-demonstrate the pyramids. This again indicates the carry-over value which has been so evident during this entire program.

Play-Oriented Program
Division III: Class XI:

Class Organization: (and specific formations)

1. Roll call and personal inspection (line)
2. Warm-up activities (open)
3. Participation phase
    - Explanation-Demonstration (4-6 min.)
    - Organized play-type activity (22-28 min.)
        - a.(station)
        - b.(teams)
4. Equipment and supplies
    - a. adequate mats
    - b. at least one horizontal bar
    - c. 2 raised balance beams
    - d. at least one climbing rope

Time Allotment:
2--4 min.
4--6 min.
28-32 min.

Warm-up Activity: (Instructor and Student Lead)

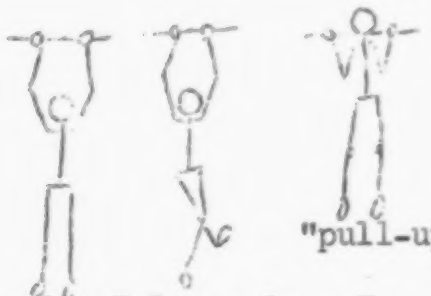
1. Head, shoulders, knees and toes
2. Scramble
3. Side-straddle hop
4. Running in place (alter pace)
5. Squat thrusts

Participation Phase:

1. Objectives:
    - a. To continue provision of opportunity for leadership
    - b. To further enhance individual development of techniques relative to selected apparatus

2. Explanation-Demonstration:
    - a. Balance beam
        - all fours walk
        - squat walk
    - b. Horizontal bar
        - rail hop
    - c. Climbing rope
        - climbing
            - hand over hand
            - foot-lock

"Bar Sketches"



3. Organized Play-Type Activity:
    - a. Follow The Leader:** The same procedures from the previous class hour will be followed and will include those additional techniques which are stated above. (3/4 available time)
    - b. Pyramids: Can You Match Us: This activity is carried on in the same manner as the previous two class hours. An additional simple pyramid can be introduced as the discretion of the instructor.

**Only two stations were utilized at any one time, so that the instructor could keep better control of his class.

Teaching Techniques: The explanation-demonstration period concerning rope climbing techniques of necessity must be very carefully done. The "foot lock" method should be emphasized along with the hand-over hand movement both of which are essential if the boy is to climb. In demonstrating the climb, the instructor should not go past the eight foot mark as this is the restriction which should be set in terms of maximum height.

If time permits, the previous skills on the bar should again be shown along with the "rail hop". Some verbal encouragement might well be given on the importance of the balance beam walks, especially the "all fours walk" in the hope that the boys will attempt this when they are leaders.

It may be necessary to pull a boy out of his leadership capacity before the alloted time has elapsed, due to obvious inability to handle the situation. There is the distinct possibility that some of the boys simply will not be able to lead at all!

Comments: (after conducting class program)

1. Warm-up: No comments.

2. Follow The Leader: Although a limited number of boys were slightly opposed to attempting the bar hop and/or the rope climb in following their leader, the majority of them continued to enjoy the activities. One of the primary limitations was the inability of some to lead at all and thus the same leaders would emerge too often and attempt the "same things". Lack of individual assistance on the climbing ropes represents a definite drawback and it was difficult to restrain them from swinging excessively on the ropes.

3. Pyramids: Can You Match Us: This play-type activity was again successful with the majority of boys eager to participate. Although the quality was not particularly good, individual and group enjoyment was abundant.

4. General: Because of the problems mentioned previously only two stations were utilized at one time. It is recommended that such a plan be followed unless control over the youngsters is exceedingly effective.

Play-Oriented Program
Division III: Class XII:

Class Organization: (and specific formations) — Time Allotments:

1. Roll call and personal inspection (line) 2--4 min.
2. Warm-up activities (open) 4--6 min.
3. Participation phase 28-32 min.
    Explanation-Demonstration (4-6 min.)
    Organized play-type activity (22-28 min.)
      a.(station throughout)
4. Equipment and supplies
    a. adequate mats
    b. at least one horizontal bar
    c. 2 raised balance beams
    d. at least one climbing rope

Warm-up Activity: (Instructor and Student Lead)

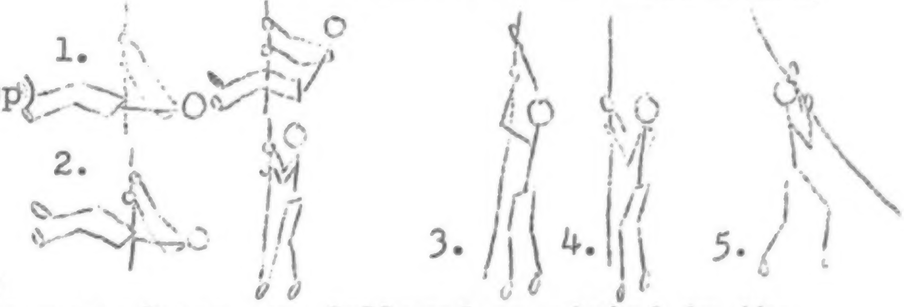
1. Scramble
2. Windmill (1-4 count, be explicit in directions)
3. Side-straddle hop
4. Running in place
5. Squat thrust

Participation Phase:

1. Objective:
   To reinforce student development of selected apparatus techniques through the medium of organized play-type activity

2. Explanation-Demonstration:
    a. Balance beam
        squat walk
    b. Horizontal bar
        pull-ups (overhand grasp)
    c. Climbing rope
        limited swinging

"Rope Sketches" (See Below)



3. Organized Play-Type Activity:
   Follow The Leader:** The same procedures are followed as stated in the previous plan. The above techniques, following demonstration, are added to the list of "possibles", from which each boy will choose when it is his turn to lead. The techniques that have been introduced are stated below:

Balance Beam:	Bar (Ladder):	Climbing Rope:
1-walk forward	1-hang and drop	1-lying to sit, return
2-walk backward	2-rail walk	2-lying to stand, return
3-sideways walk	3-leg raisers	3-hanging (chinning)
4-all fours walk	4-rail hop	4-climbing
5-squat walk	5-pull-ups (overhand grasp)	5-limited swing

Teaching Techniques: The instructor should observe the leaders closely and intervene when too many techniques are being by-passed. For instance, it would be hoped that the majority of boys would attempt both the climb and the swing on the rope. However, swinging may take precedence and this is where the intervention will become necessary. The same might be true concerning the pull-ups and the bar hop and the all-fours walk on the balance beam.

**Only two stations were utilized at any one time so that the instructor could keep better control of his class.

Comments: (after conducting class program)

1. Warm-up: No comments.

2. Follow The Leader: The "squat walk" on the balance beams and the "pull-up" on the bar were difficult for the boys in terms of realizing success. It was also difficult to persuade leaders to try these activities. Both, it is believed, would develop within this play-type setting if adequate time were allowed. It is significant here, as it has been numerous times in the past, that the majority of these boys would far rather undertake that which they are capable rather than tackling new and/or difficult techniques.

3. General: Again, it is emphasized that rope swinging activities obviously would be very popular with the educable mentally retarded boy. In this regard many new innovations (i.e. swedish box) may be possible, particularly with the play-oriented group.

Play-Oriented Program
Division III: Class XIII:

Class Organization: (and specific formations)	Time Allotments:
1. Roll call and personal inspection (line)	2--4 min.
2. Warm-up activities (open)	4--6 min.
3. Participation phase	28-32 min.
Explanation-Demonstration (4-6 min.)	
Organized play-type activity (22-28 min.)	
a.(obstacle course)	

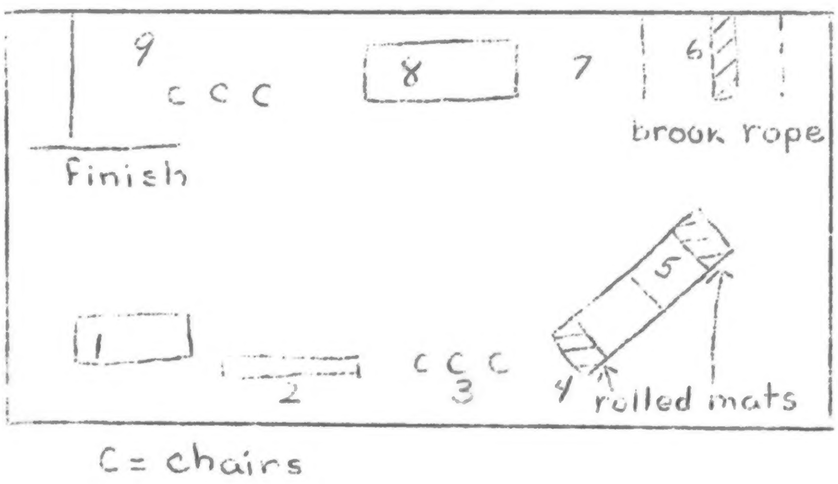
4. Equipment and supplies
   - a. 8 tumbling mats(5' x 10' x 2")
   - b. 1 raised balance beam
   - c. 6 chairs or cones
   - d. 1 climbing rope

Warm-up Activity: (Instructor and Student Lead)
1. Arm circles (start small, to large and return)
2. Side-straddle hop
3. Windmill
4. Running in place
5. Squat thrusts

Participation Phase:

1. Objective:
   To evaluate students through a competitive medium which involves selected fundamental techniques.

2. Explanation-Demonstration:
   The "obstacle course" includes the following:
   - a. Forward roll (1)
   - b. Walk forward on raised balance beam (2)
   - c. Dog run through chairs (zig-zag) (3)
   - d. Dive and roll over the fence (rolled mat) (4)
   - e. Log rolling (rolling on mat) (5)
   - f. Swing over the brook (short rope swing over a rolled mat. (6)
   - g. Jump and turn ($\frac{1}{2}$) (7)
   - h. Backward roll (8)
   - i. Crab walk home (9)



3. Organized Play-Type Activity:
Obstacle Course: The instructor walks through the course explaining each obstacle as he goes. He then runs through the course, without any comment, to illustrate what is meant by "quickly". The boys are then told that they are each going to run through the course two times and that they are to perform as well and as quickly as possible. They are also told that each team (two teams) would be judged on the basis of their "total times" and the "best form". Following the second trial, the evaluation form should be completed in terms of performances and the total time taken for the boys to complete the course. If time should permit, following the second running, boys may form in their groups for "Follow The Leader."

Teaching Techniques: Although the purpose of the obstacle course is to rate the boys in terms of their achievement through play-type activities, the name of the game is "competition" insofar as they are concerned. The individual "times" may be disclosed; however, the emphasis should be placed on the "total time" taken by the group. Three seconds should be added to the total each time a boy misses an obstacle. The instructor must be prepared to run ahead of any student that he believes may encounter considerable difficulty.

Preparations must be made ahead of time to arrange for the regular teacher to aid and assist during this busy class hour. Specifically, it is recommended that he become the "spotter" for the dive and roll. It must be expected that some problems may occur; however, most boys ought to go through the course and experience some degree of success. Student reaction to this course and to the one held during the thirteenth class hour should be closely compared

Comments: (after conducting the class program)

1. Warm-up: No Comments:

2. Obstacle Course: This course like the one following completion of Division I, proved successful. They liked the highly competitive atmosphere and in some cases the excellent performances, particularly in the "dive and roll" would have to be rated as phenomenal. It is true that they generally lacked the attention to detail that was evident with the skill-oriented group but certainly the total performances were gratifying.

3. General: At one school the "one-half jump and turn" and the "backward roll" were eliminated. Crawling under a four foot long table with twenty inches of clearance was substituted instead. It is recommended that crawling under a table be included in an obstacle course for the educable mentally retarded boy.

CHAPTER VI:
FREE PLAY ACTIVITY PHYSICAL EDUCATION PROGRAM

A. Introduction:

This program was presented on the premise that more could be gained by the educable mentally retarded boy if the major emphasis was placed on free selection of play-type activities and subsequent participation in same. Such a program, it was thought, would allow the freedom of physical and mental expression which is necessary in aiding the student to achieve recognized objectives of physical education.

B. Aim:

The aim was to assist each boy in participating as a part of a group or as an individual and whose experiences in play-type activities through the medium of free choice would enable him to gain greater appreciation concerning the physical, social and emotional aspects of such activity.

C. Objectives:

The objectives were:

1. establish an adequate rapport between teacher and student.
1. To establish an adequate rapport between teacher and student.
2. To establish basic guidelines which are to be adhered to while in the locker room and gymnasium.
3. To define and demonstrate definite, but simple, organizational procedures.
4. To guide the boys with an awareness that:
    a. Abilities and attention spans may differ greatly.
    b. An informal classroom atmosphere should prevail.
    c. Familiar activities may be more popular in terms of selection.
    d. Concrete proposals rather than abstract ones are likely to be grasped more quickly.
    e. Familiarity in approach is advisable as is variety in technique.
    f. Individual differences should be considered.
    g. Learning can occur by indirect student demonstration.
    h. Problems of discipline will occur and should be handled diplomatically and without threat.
    i. Praise, rather than reproof, appears to be desirable.
    j. Enjoyment through activity can promote self-motivation and satisfaction which may lead to "success"
5. To encourage participation within the group and as an individual.
6. To recognize success.
7. To contribute, whenever possible, to the aim of this program.

D. Structure:

1. This program basically consisted of "free-play periods" (class hours) during which no orgnized instructional type program was adhered to other than roll call procedures, personal inspection and warm-up activities.
2. The following limitations prevailed relative to time allotments.
    a. Roll call and personal inspection--------- 2--4 minutes.
    b. Warm-up Activities------------------------ 4--6 minutes.
    c. Selected Activities----------------------- 28-32 minutes.

3. Selected Activities were chosen in two ways:
    a. One boy was allowed to choose the activity within the limitations of the available facilities, equipment and supplies. Each boy in the class took his turn at making a selection. The selection had to meet with approval by the majority and in the cases where it did not, another choice was made. When agreement could not be reached or when confusion appeared eminent the optional procedure was allowed (see b.).
    **b. Because of a recommendation from the Jury and the Doctoral the option of having every boy in the class do as he pleased, in terms of an activity, was inserted. This was not utilized in preference to the foregoing procedure unless general agreement could not be reached.
4. When requested by a student the instructor offered at least three choices concerning possible activities which could be feasibly participated in by the class. Such suggestions were:
    a. Based on the poast experiences of the students.
    b. Based on activities (types of) currently being utilized by the Skill-Oriented and Play-Oriented Groups.
5. Fundamentals, skills or techniques involved in any of the activities were not explained, demonstrated or practiced.
6. The instructor acted as an official during any team game, as a spotter during stunts or tumbling and as a mediator or partner during individual-type activities.
***7. It was permissible for the same activities to be selected consecutively by members of the class.

E. Class Organization:

The line formation was used for purposes of taking roll and personal inspection. The boys drew numbers from a "draw box" to determine who would form the front line for the warm-up activities. This division was also used for purposes of forming teams, however, the boy making a selection could form his own teams if he wished to do so.

Following the warm-up activities, which following the eighth class hour saw at least one and most of the time two boys assisting the instructor, the class members formed a circle (sitting) so that the initial activity could be selected. The boy whose choice it was explained the activity to the rest of the group. The instructor usually assisted the boy in interpreting what was being said so that undue confusion could be avoided. At the completion of the initial free-play activity, which lasted from eight to ten minutes unless cut short by the instructor, the circle was again formed and the second selection made by another boy. Usually three such selections were made during the course of the class hour.

F. Presentation of the Free Play Activity Class Hours:

On the pages which follow each day is presented via a daily class plan. The comments as to the effectiveness of the activities and/or recommendations regarding same are included on each of these thirty-nine plans.

** This option was recommended by the Jury and the Doctoral Committee.

*** It became obvious during the Pilot Study that it would be highly impractical not to allow an activity to be chosen by two or more boys in a consecutive manner.

Free Play Program
Class I:

Class Organization:	Time Allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up Activities (open formation)	4--6 min.
3. Selected Activities	28-32 min.
4. Evaluation Phase	

Warm-up Activity: (Instructor Leads)
1. Head, shoulders, knees and toes (verbal, no count)
2. Arm circles (verbal, no count)
3. Scramble (seat, feet, stomach, back, knees, feet) (do not go from feet to back!)

Selected Activities:

Fernald School:
(17 boys)
1. Basketball (3 basketballs)
2. Freeze Tag
3. Riding Toys (tricycles, wagons, scooters, push-buggies)

Wrentham School:
(9 boys)
1. Run For Your Supper
2. Basketball (3 basketballs)
3. Line Soccer (2 soccerballs)

Comments: (after conducting class program)

1. Warm-up: The boys were intrigued both by the "head, shoulders, knees and toes," and the "scramble" warm-up activities. They experienced only minor difficulty with the concept involved with the "arm circles."

2. Basketball: The basic understanding of the game was very poor and the skill levels were highly inadequate. Despite this, the game was enjoyed by the majority although two or three boys chose not to join in playing and preferred to watch the others.

3. Freeze Tag: Apparently this had been a recent activity presented to them prior to the beginning of this study. They enjoyed it and particularly when more than one boy was allowed to be "it."

4. Riding Toys: At this school numerous riding toys were available and the third boy chose this as the activity. The instructor had to intervene to prevent injuries from occuring and/or toys from being broken. It was not a successful activity and more ill feeling developed than any other observable trait.

1. Warm-up: Similar to Fernald (Comment No. 1)

2. Run For Your Supper: This apparently had been previously introduced prior to the beginning of this study. It was marked by considerable confusion and the outcomes were not regarded by the instructor as favorable.

3. Basketball: For the most part, this was not favorable inasmuch as too many boys chose not to participate actively. Those who did play enjoyed the game but the level of skill and understanding was far below what might be expected of a normal boy in a similar situation.

4. Line Soccer: What was generally regarded as a relatively simple activity did not turn out particularly well. The "number" call-out system was used and this simply did not work. By the time that the instructor had changed to using last names confusion was evident and the period had ended.

5. General: Too many boys had chosen not to participate in the activities. Despite this difficulty, they were happy and did seem to enjoy themselves.

* * * * * * *

5. General: The boys were, for the most part, favorably impressed with the idea that they would be able to select the activities themselves.

Free Play Program
Class II:

Class Organization:	Time Allotmant:
1. Roll call and personal inspection (line formation).	2--4 min.
2. Warm-up Activities (open formation)	4--6 min.
3. Selected Activities	28-32 min.
4. Evaluation Phase	

Warm-up Activity: (Instructor Leads)
1. Raise up on toes ("up---down")
2. Side-straddle-hop (1-2 count)
3. Squat thrust (1-4 count)
4. Modified push-ups (5, from knees, "up--down")

Selected Activities:

Fernald School:
(17 boys)

1. Soccer Baseball (slightly deflated soccer balls, 2)
2. Line Soccer (same as above)

Wrentham School:
(9 boys)

1. Jail Tag
2. Basketball (3 basketballs)
3. Soccer Baseball (2 slightly deflated soccer balls)

Comments: (after conducting class program)

Fernald School:

1. Warm-up: Much difficulty was experienced with the "squat thrust" and the "modified push-up". It appeared to be a problem of not understanding how they were to be executed although the upper arm strength factor and the aspect of hard work also seemed to enter in. The "side-straddle-hop" was well accepted but the problems involving coordination with these boys becomes rather evident. Although "raising up on the toes" did not seem to sufficiently challenge them, no difficulty was apparent.

2. Soccer Baseball: There was evidence that they had played this a number of times previously and the activity was a successful one with all of the boys participating. In almost every case the ball was kicked with the toe and they took great pride in being able to strike the wall on the opposite side of the gymnasium.

3. Line Soccer: Again it was evident that they had played this before; however, the instructor did find that using last names was more effective than trying to have the boy remember a number. Some easy goals were scored in that the boys had no practice whatsoever in terms of what to do.

Wrentham School:

1. Warm-up: Similar to Fernald (Comment No. 1)

2. Jail Tag: The boy that selected this explained it to the rest of the group and they proceeded to anjoy the activity. This enjoyment was short-lived as they didn't seem to want to run as much as the game demanded and it wasn't long before at least half of them were refusing to continue.

3. Basketball: The older and in this case the more skillful dominated the game while team work was almost nil. Despite this the game did continue throughout with most of the boys occasionally getting a shot at the coveted basket.

4. Soccer Baseball: This game brought forth the best participation of the class hour as kicking the ball fascinated even those who had been reluctant to participate in the other activities.

Free Play Program
Class III:

Class Organization:	Time Allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up Activities (open formation)	4--6 min.
3. Selected Activities	28-32 min.
4. Evaluation Phase	

Warm-up Activity: (Instructor Leads)
1. Side-straddle-hop
2. Windmill (1-4 count)
3. Sqaat thrust
4. Modified push-ups (from 6 to 8)

Selected Activities:

Fernald School:
(17 boys)
1. Basketball (3 basketballs)
2. Jump The Buck (one buck)
3. Walking On Balance Beam (1, 12' balance beam)
4. Walking On Two Beams (2, 12' balance beams)

Wrentham School:
(9 boys)
1. Baseball (2 plastic bats and 2 balls)
2. Individual and Group Rope Jumping (6 individual ropes and 1 14' jump rope)

Comments: (after conducting class program)

1. Warm-ups: Performances in the "squat thrusts" were greatly improved while the"modified push-up" continued to be difficult. It did not appear that this type of student could be expected to effectively follow the actions involved in the "windmill." It is recommended that the instructor turn his back to the group momentarily so that they can properly observe what is expected of them.

2. Basketball: The two extra balls were utilized on the sidelines by three boys who did not wish to play basketball with the others. The game itself progressed reasonably well but the skill in terms of basketball was very bad. Also they generally lacked even a meager conception of the game.

3. Jump The Buck: This piece of equipment was on the sidelines and they selected it. The activity was very successful and disciplinary problems were very slight despite the long line and the waiting.

4. Walking On Balance Beam: They noticed the beams being used by the PO group in the other half of the gymnasium and prevailed upon the boy who had the choice to select same. Two squads were utilized and they enjoyed the activity.

1. Warm-up: Similar to Fernald (Comment No. 1)

2. Baseball: The plastic bats and balls worked well and for the most part the boys did participate. The game, as it was selected, was a variation of "work-up."

3. Jumping Ropes: The boy whose choice it was knew that there were jump ropes in the storeroom and asked the instructor if they could use them. He just wanted everyone to "jump." Very few of them did much successful jumping with the single ropes; however, two or three were able to get over the "swinging rope" without great difficulty. It was interesting here that at least two boys simply sat down and wanted no part of this activity.

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5. Walking On Two Beams: The next boy wanted to try and walk on two parallel beams at the same time. The instructor placed them about twelve inches apart and the boys proceeded to walk along with much fun obviously being had by the large majority. Interest waned very quickly on this chosen activity and the instructor was able to go on to a fifth one!

Free Play Program
Class III:

(continued)

6. Freeze Tag: The tine left for this activity was short but despite this the group had a good time and did enjoy the activity.

7. General: This had been a very busy day for this group of boys as they certainly went from one activity to another with at least fair success or better experienced in each. The carry-over of interest was quite significant in terms of the balance beams which were being used by the P-O group in an organized activity.

Free Play Program
Class IV:

Class Organization:	Time Allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up Activities (open formation)	4--6 min.
3. Selected Activities	28-32 min.
4. Evaluation Phase	

Warm-up Activity: (Instructor Leads)

1. Windmill
2. Squat thrust
3. Modified Push-ups (from 7 to 9)
4. Running in place (vary the pace)

Selected Activities:

Fernald School:
(17 boys)

1. Basketball (3 basketballs)
2. Punch Ball Baseball (2 slightly deflated volleyballs)
3. Kick Ball Baseball (2 slightly deflated soccer balls)

Wrentham School:
(9 boys)

1. Rope Climbing (1 climbing rope)
2. Basketball (3 basketballs)
3. Tag
4. Walking on Balance Beam (1 12' balance beam)
5. Individual Ball Activities (variety of basketballs, volleyballs and soccerballs)

Comments: (after conducting class program)

1. Warm-up: Individual performance in the "squat thrust" continued to show improvement; however, the same could not be said regarding the "modified push-up." Lack of upper arm strength obviously was a factor. The "windmill" and "running in place" activities were both quite successful from the standpoint of participation.

2. Basketball: Although the outcome was favorable the individual skills exhibited were not. Team organization also left much to be desired. Those boys who did not play on a team bounced balls or played catch on the sidelines.

3. Punch Ball Baseball: Using a volleyball and the traditional diamond alignment this probably constituted the most successful free play activity to date. The participation was one short of being 100% and the interaction was very good as was the enjoyment.

4. Kick Ball Baseball: The next boy suggested the same game but wanted to kick the ball. Again the participation was very good and the boys did enjoy the activity. Two of them did not want to play and watched from the sidelines.

1. Warm-up: Similar to Fernald (Comment No. 1)

2. Rope Climbing: Approximately half of the group tried this activity while the others watched.

3. Basketball: This was more of a hodgepodge than it was a game and the instructor cut it short due to poor participation and/or inactivity.

4. Tag: This was the traditional variety and did progress fairly well for a short time. Again it was obvious that they did not want to do too much running.

5. Walking on Balance Beam: As was true at Fernald during the previous class hour this represented the first sign of any "interest carry-over" concerning what the other students (Skill-Oriented & Play-Oriented Programs) might be doing. The activity was successful with the beam flat on the floor.

6. Individual Ball Activities: What began as a basketball game ended up with everyone having a ball of their own. The instructor had problems in restricting some of them to the area.

Free Play Program
Class V:

Class Organization:	Time Allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up Activities (open formation)	4--6 min.
3. Selected Activities	28-32 min.
4. Evaluation Phase	

Warm-up Activity: (Instructor Leads)

1. Windmill
2. Lift em and spread em (verbal)
3. Modified push-ups (from 8 to 10)
4. Running in place

Selected Activities:

Fernald School:
(17 boys)

1. Squat Vault on Horse (1 side horse)

Wrentham School:
(9 boys)

1. Football (1 football)
2. Rope Climbing (1 climbing rope)
3. Individual Ball Activities (basketballs or playground balls)

Comments: (after conducting class program)

Fernald School:

1. Warm-up: "Running in place," was very popular with the boys and they particularly enjoyed changing the pace. Concerning the "lift em and spread em" activity the tendency was not unlike that found among normal boys. More specifically, this problem was concerned with raising the legs too high.

2. Squat Vault: This same activity was selected by each successive boy and thus involved the entire class hour. The instructor used a single line and spotted for each boy as he came over the horse. Minor discipline problems did occur because of the "waiting" which was involved. Only one boy refused to participate in this activity and chose instead to watch the others.

Wrentham School:

1. Warm-up: Similar to Fernald (Comment No. 1)

2. Football: They attempted an actual game-like situation but again the knowledges, understandings and skill levels were so inadequate and the outcome can be stated as only fair. All of the boys did participate to begin with.

3. Rope Climbing: Again this was requested and as was true during the previous class hour only half of the group attempted to climb. The instructor spotted for each boy and occasionally gave a "helping" boost.

4. Individual Ball Activities: What began as something else almost immediately regressed to individual activities. They simply did not stay together and thus were allowed to go their own way. Most of the boys grabbed basketballs and bounced them or tried to make baskets while at least two others kicked play-ground balls and tried to get them over the gymnasium divider.

Free Play Program
Class VI:

Class Organization:	Time Allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up Activities (open formation)	4--6 min.
3. Selected Activities	28-32 min.
4. Evaluation Phase	

Warm-up Activity: (Instructor Leads)

1. Windmill
2. Lift em and spread em
3. Wing-flapper (1-4 count)
4. Running in place

Selected Activities:

Fernald School:
(17 boys)

1. Arm Walk (1 set parallel bars)
2. Hide The Ring (ordinary inexpensive ring)
3. Line Soccer (2, slightly deflated soccer balls)

Wrentham School:
(9 boys)

1. Football (2 footballs)
2. Individual Ball Activities (basketballs, soccer balls, and playground balls)

Comments: (after conducting the class program)

1. Warm-up: Little improvement was noted in the "lift em and spread em" activity. The "wing flapper" like the "windmill" was confusing for them and again it is recommended that the instructor face away from the group momentarily while demonstrating this activity.

2. Arm Walk: Although all but one boy tried this activity only one in three succeeded in making it over the entire distance. Again the single line was utilized as the formation. Upper arm strength is an important factor here and certainly lack of same concerning many of these boys was quite obvious.

3. Hide The Ring: The boy making the selection wanted the instructor to hide his ring while everyone closed their eyes. This he did and then they swarmed over the area while he tried to indicate to each whether they were "hot" or "cold". They enjoyed this activity.

4. Line Soccer: Although the time was limited for this activity the outcomes were good. The instructor had just enough time to get everyone into the middle. Some of the boys really "blast" the ball.

1. Warm-up: (Similar to Fernald Comment No. 1)

2. Football: For the second consecutive day the opening choice was football. The situation was unchanged and much confusion resulted when the instructor tried to guide them.

3. Individual Ball Activities: This had now become an actual selection, which was, "to play with the balls". Again basketballs were the most popular choice but in all at least four specific types were utilized. The instructor moved about the group playing catch or whatever a particular boy wanted to do.

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5. General: The presence of various pieces of apparatus at this school afford this group some unique opportunities.

Free Play Program
Class VII:

Class Organization:

1. Roll call and personal inspection (line formation)
2. Warm-up Activities (open formation)
3. Selected Activities
4. Evaluation Phase

Time Allotment:

2--4 min.
4--6 min.
28-32 min.

Warm-up Activity: (Instructor Leads)

1. Touch Toes (1-2 count)
2. Wing Flapper
3. Lift em and spread em
4. Running in place

Selected Activities:

Fernald School:
(17 boys)

1. Freeze Tag
2. Basketball (3 basketballs)
3. Squat Vault (1 side horse)

Wrentham School:
(9 boys)

1. Baseball (2 plastic bats and 2 balls)
2. Block Building (wooden containers of various sizes)
3. Individual Activities (bean bags and balls of various sizes)

Comments: (after conducting class program)

1. Warm-up: Although the boys enjoyed the "toe touching" activity they certainly were not unlike the normal student in not attempting to keep their legs straight. Little improvement was noted in the "lift em and spread em" especially concerning how high the legs were to be lifted from the floor.

2. Freeze Tag: This activity was very successful.

3. Basketball: This was not as effective as it had been in the past. It is believed, however, that many of them simply were tired from all of the running involved in "freeze tag." This also marked the first notable instance of "roughness" and the activity had to be cut short by the instructor.

4. Squat Vault: Participation was not as complete as it had been when this activity was selected during the fifth class hour and it was necessary for the instructor to ask three boys to "sit down" while the others remained in a single line formation.

1. Warm-up: (Similar to Fernald Comment No. 1)

2. Baseball: Again the plastic bats and balls were utilized and as before it was difficult to convince some that there was more to the game than just taking their turn at bat.

3. Block Building: The wooden containers used by the others had been noticed by one of the boys and he thought that they would make good building blocks. Unfortunately there were only enough of them to keep about half of the group occupied so both "baseball" in a limited fashion and "block building" proceeded at the same time much to the delight of each group.

4. Individual Activities: The boy making the choice wanted the group to play with the balls as they had during the previous class hours, but in helping the instructor procure same he spotted a box containing beam bags and the activity thus primarily became one of "bean-bag throwing."

Free Play Program
Class VIII:

Class Organization:

1. Roll call and personal inspection (line formation)
2. Warm-up Activities (open formation)
3. Selected Activities
4. Evaluation Phase

Time Allotment:

2--4 min.
4--6 min.
28-32 min.

Warm-up Activity: (Instructor Leads)

1. Touch Toes (1-2 count)
2. Wing Flapper
3. Lift em and spread em
4. Chu-chu train (treadmill)

Selected Activities:

Fernald School:
(17 boys)

1. Basketball (3 basketballs)
2. Straddle Vault (1 buck)
3. Squat Vault (1 side horse)

Wrentham School:
(9 boys)

1. Baseball (2 plastic bats and balls)
2. Jump The Shot (1 14' rope with an old sneaker tied on one end)

Comments: (after conducting class program)

1. Warm-up: The "chu-chu train" (treadmill) proved to be highly acceptable to the boys. Success was easily attained and the mimetics involved seemed to help considerably. No count in this activity is recommended as the boy is allowed to develop his own rhythm.

2. Basketball: Three in four did participate while the others either watched or played catch on the sidelines. Despite the low skill level and general lack of understanding the instructor felt that the boys enjoyed the activity.

3. Straddle Vault: Although a few held back the general participation was quite good. Part of this must be attributed to the "spotting" done by the instructor.

4. Squat Vault: The participation was about the same in this activity. They enjoyed it more this time than they had previously but of course the skill level was a deterrent and "spotting" was necessary.

1. Warm-up: (Similar to Fernald Comment No. 1)

2. Baseball: The outcomes were poor here as they apparently had selected it too often as an activity. Even those who once enjoyed it were prone to only half-hearted participation.

3. Jump The Shot: The choice of this activity obviously carried over from what the Play-Oriented Group was doing on the other side of the gymnasium partition. They enjoyed it a great deal with the exception of two boys who simply were afraid to attempt jumping at all. Several of the boys clamoured to be the "swinger" and shared this duty with the instructor.

Free Play Program
Class IX:

Class Organization:	Time Allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up Activities (open formation)	4--6 min.
3. Selected Activities	28-32 min.
4. Evaluation Phase	

Warm-up Activity: (Instructor and Students (2) Lead)

1. Touch Toes
2. Wing Flapper
3. Rope-jumping mimetics (vary the pace)
4. Chu-chu train

Selected Activities:

Fernald School:
(17 boys)

1. Hot Spuds (4 basketballs)
2. Punchball Baseball (2 volleyballs)
3. Kickball Baseball (2 soccerballs)
4. Rolling on Wheelboards

Wrentham School:
(9 boys)

1. Throwing and Catching (1 basketball)
2. Hot Spuds (2 basketballs)
3. Kickball Baseball (2 soccerballs)

Comments: (after conducting class program)

1. Warm-up: Rope jumping mimetics like "running in place," "head, shoulders, knees and toes," "scramble," and "chu-chu train" proved to be quite popular with the boys. Again they appreciated the change in pace that this activity offered.

2. Hot Spuds: (PO Program, Class 8, Division I) The boy whose choice it was could not think of what he wanted to do so he was offered the same activities that were being utilized by the Play-Oriented group during this same class hour. He selected "Hot Spuds" and two circles were formed each with two playground balls. The activity was successful from the standpoing of participation.

3. Punchball Baseball: Utilizing a volleyball this activity progressed well. Competition became rather spirited at time.

4. Kickball Baseball: Too many of the boys did not like the selection and/or the boy making same. The activity had to be discontinued following one "at bat" for each team.

1. Warm-up: Similar to Fernald (Comment No. 1)

2. Throwing and Catching: When the boy whose choice it was hinted toward throwing the ball, the instructor asked him if a circle formation would be acceptable. He responded favorably and the entire group tossed and caught the ball standing and then sitting. This was rated as a successful group activity.

3. Hot Spuds: The same thing happened here that did at the Fernald School; however, the outcomes were not as favorable. Basically this was due to the inability of at least two boys to grasp the concept of keeping the ball in the circle.

4. Kickball Baseball: When the choice of Baseball was again made, the instructor asked the boy if they might kick the ball instead of using the plastic bats and balls. He readily agreed and although some were disgruntled the game did progress reasonably well.

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5. Rolling on Wheelboards: These had been left in the gymnasium by mistake and after much pleading they were allowed to use them. Disciplinary problems did arise, however, as there were not enough wheelboards for everyone and they did not agree on whose turn it should be and when. The instructor had to speak with them on the concept of "fair play" and "sharing with others."

Free Play Program
Class X:

Class Organization:	Time Allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up Activities (open formation)	4--8 min.
3. Selected Activities	28-32 min.
4. Evaluation Phase	

Warm-up Activity: (Instructor and Students (2) Lead)
1. Touch Toes
2. Windmill, sitting (1-4 count)
3. Rope-jumping mimetics
4. Chu-chu train

Selected Activities:

Fernald School:
(17 boys)

1. Volleyball (1 volleyball net and standards, 2 balls)
2. Kickball Baseball (2 soccerballs)

Comments: (after conducting class program)

1. Warm-up: The "windmill sitting" activity did not confuse the boys nearly as much as had the regular "windmill" (standing). They were able to pay more attention to what they were supposed to be doing while in the sitting position.

2. Volleyball: The volleyball standards which were always in plain view finally prompted one boy to select this as an activity. To begin with they all participated but within a few minutes at least half of the group had professed a general disinterest in the activity. Despite this the instructor allowed the game to run its course while the others watched or played catch with other volleyballs on the sidelines. The skill-level relative to this game was very low.

3. Kickball Baseball: By direct contrast the participation in this team activity was very good and enjoyment was quite evident.

4. General: It is not unusual at all for these boys to argue rather emphatically concerning interpretation of the rules.

Wrentham School:
(9 boys)

1. Baseball (2 plastic bats and balls)
2. Basketball (3 basketballs)
3. Baseball (2 plastic bats and balls)

1. Warm-up: Similar to Fernald (Comment No. 1)

2. Baseball: Participation was not good and the majority of the group ended up "sitting down" and watching only four boys participate in a modified game with two batters, a pitcher and an outfielder.

3. Basketball: This too was relatively unsuccessful and only three boys ended up playing. The others went to the sidelines and asked for balls of their own to play with or were content to watch the action.

4. Baseball: This was again the selection but this time most of the boys did participate and the game could be counted as reasonably successful.

5. General: It was determined here that "shouting encouragement" from the sidelines did enhance individual participation a great deal. They thrived on praise and/or attention.

Free Play Program
Class XI:

Class Organization:	Time Allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up Activities (open formation)	4--6 min.
3. Selected Activities	28-32 min.
4. Evaluation Phase	

Warm-up Activity: (Instructor and Students (2) Lead)
1. Dribble-pivot mimetics (verbal)
2. Windmill, sitting
3. Rope-jumping mimetics
4. Chu-chu train

Selected Activities:

Fernald School:
(17 boys)
1. Indian Wrestling (2, 5' x 10' tumbling mats)
2. Jump The Shot (2, 14-16' ropes with old sneaker tied on end)

Wrentham School:
(9 boys)
1. Trampoline (1 trampoline)
2. Beam Walking (2, 12' balance beams)

Comments: (after conducting class program)

1. Warm-up: Because they had not had previous directed instruction more difficulty was encountered with the "dribble-pivot-mimetic" than was true concerning the other two groups (Skill-Oriented and Play-Oriented Programs). The performance in the "windmill sitting," very definitely improved while "rope jumping mimetics" and the "chu-chu train" remained very popular. When so-called "popular" warm-up activities are included only minimal urging is necessary with those boys who might otherwise balk at participating.

2. Indian Wrestling: Approximately three-quarters of the boys did actively participate while the others watched or attempted to do something of an individual nature on the padded mats. The outcomes must be regarded as successful and of course individual superiority was a big factor in terms of motivating the student to continue the activity.

3. Jump The Shot: The instructor had them form two circles. He allowed them to do their own "swinging" and surprisingly this worked out quite well. They really enjoyed the activity a great deal and did not want to stop when the available time had elapsed.

1. Warm-up: Similar to Fernald (Comment No. 1)

2. Trampoline: Because the trampoline was within the peripheral of the play area they obviously wanted to utilize it. The instructor was careful not to allow anyone do any more than what could be properly referred to as rudimentary trampoline skills. They enjoyed the activity a great deal and with two boys making the same selection they stayed on it for most of the class hour.

3. Beam Walking: Fewer boys seemed to be enthused about this activity than had been during the initial selection. Two beams were utilized but the outcomes could only be rated as fair. The presence of the trampoline obviously had influenced this apparent disinterest.

Free Play Program
Class XII:

Class Organization:	Time Allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up Activities (open formation)	4--6 min.
3. Selected Activities	28-32 min.
4. Evaluation Phase	

Warm-up Activity: (Instructor and Students (2) Lead)

1. Dribble-pivot mimetics
2. Windmill, sitting
3. Bicycle and kickover (verbal)
4. Rope-jumping mimetics

Selected Activities:

Fernald School:
(17 boys)

1. Jump The Shot (2, 14-16' ropes with old sneaker tied on end)
2. Basketball (3-4 basketballs)

Wrentham School:
(9 boys)

1. Trampoline (1 trampoline)

Comments: (after conducting class program)

Fernald School:

1. Warm-up: It was very difficult for majority of boys to grasp the technique of supporting the lower body weight with the arms propped under the hips while attempting the "bicycle". This had to be demonstrated individually in almost every case. On the other handthey did enjoy attempting to bring the legs over the head to touch the floor in the "kickover."

2. Jump The Shot: Two boys made this activity their selection and as a result most of the class hour was devoted to the activity. The outcomes were very good as the two groups really worked at getting over the "shot." Several contests were held between the two groups.

3. Basketball: By contrast and quite propably due to the preceeding activity the participation was poorer than it had even been. Almost half of the group preferred to watch the others or play with individual balls on the side-line area.

Wrentham School:

1. Warm-up: Similar to Fernald (Comment No. 1)

2. Trampoline: As was true during the previous class hour the trampoline was again in the area and it was promptly selected by three successive boys and thus this activity lasted for the entire class hour. Again restrictions did have to be made by the instructor, especially for the two or three more highly skilled boys concerning "do's and don'ts" on the trampoline.

Free Play Program
Class XIII:

Class Organization:	Time Allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up Activities (open formation)	4--6 min.
3. Selected Activities	28-32 min.
4. Evaluation Phase	

Warm-up Activity: (Instructor and Students (2) Lead)

1. Dribble-pivot mimetics
2. Windmill, sitting
3. Bicycle and kickover
4. Kneebends (1-2 or down--up)

Selected Activities:

Fernald School:
(17 boys)

1. Jump The Shot (2, 14' ropes with old sneakers tied on the end)
2. Tug of War (1, long length of heavy nylon rope which was ordinarily utilized as a pool divider)

Wrentham School:
(9 boys)

1. Music Appreciation (phonograph and record)
2. Rope Swinging (1 climbing rope)
3. Individual Ball Activities (basketballs, volleyballs, soccer balls and playground balls)

Comments: (after conducting class program)

1. Warm-up: The boys reacted favorably to the "kneebend" (thigh parallel to the floor). It is recommended that very little delay be allowed whenever this type of student is involved with an activity which does require any degree of balance for success.

2. Jump The Shot: As was true during the two previous class hours this remained as a successful activity involving two circles. Competition was sporadic as they were generally content to prove to themselves that they could succeed. Most of the boys did try their hand at "swinging."

3. Tug of War: This consisted of several very "exciting" contests. The instructor was careful to be certain that the two teams were relatively even. They simply did not tire of the activity and kept at it until the available time had expired.

1. Warm-up: Similar to Fernald (Comment No. 1)

2. Music Appreciation: A phonograph had been left in the gymnasium and the boy making the choice asked if they might listento it. The wish was granted and the entire group formed a semi-circle and listened to the records for approximately eight minutes.

3. The second choice of the day brought "rope swinging" into play for the first time. The boys were allowed to stand on the first step of the bleacher, to swing out and then swing back to the bleacher. This activity was quite successful.

4. Individual Ball Activities: Again the choice was for ball activity and as in the past almost every boy eventually got a ball of his own to play with.

Free Play Program
Class XIV:

Class Organization:	Time Allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up Activities (open formation)	4--6 min.
3. Selected Activities	28--32 min.
4. Evaluation Phase	

Warm-up Activity: (Instructor and Students (2) Lead)

1. Bicycle and kickover
2. Kneebends
3. Straight-leg-stretchers (reach for imaginary line)
4. Sit-ups (arms outstretched, from 8 to 10)

Selected Activities:

Fernald School: (17 boys)	Wrentham School: (9 boys)
1. Obstacle Course	1. Obstacle Course

Comments: (after conducting class program)

Fernald School	Wrentham School
1. Warm-up: The "straight-leg-stretcher" was quite difficult for the students to comprehend. They had difficulty in pressing the hands back toward an imaginary line behind them. The performance of the "sit-ups" (arms outstretched) was not particularly good. It appeared as though they were confused after having been teste (AAHPER) originally with the arms behind the neck.	1. Warm-up: Similar to Fernald (Comment No. 1)

2. Obstacle Course: This the same obstacle course that was administered to the Skill-Oriented and Play-Oriented groups during the previous class hour. Because the principal investigator did desire to be present this activity was held over until today.

In the case of both groups (Fernald and Wrentham) the obstacle course was very well received. It was obvious from the outset that inasmuch as they had not had any demonstration, instruction, or practice that they lacked a great deal of detail in terms of performance and in a few cases the boy was unable to complete the course. It was significant, however, that the more highly skilled boys in both groups did perform reasonably well.

The greatest difficulty, concerning both groups, was had with the raised balance beam, the dodging run, and leaping over the boxes along with the standing broad jump. In both cases they finished lower as a group than the Skill-Oriented and Play-Oriented groups respectively.

Obstacle Course

1. Walk the raised balance beam
2. Run a zig-zag course through chairs or cones
3. Run and leap over the wooden boxes
4. Take softball out of pasteboard container and throw it against wall. Retrieve and place back in the box.
5. Take basketball out of box and dribble around the six chairs and then pass the ball to the instructor at center court.
6. Run to edge of mat and do a standing broad jump.
7. Run around chair or cone and continue to finish line....
8. via a one-foot hop

Free Play Program
Class XV:

Class Organization:	Time Allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up Activities (open formation)	4--6 min.
3. Selected Activities	28-32 min.
4. Evaluation Phase	

Warm-up Activity: (Instructor and Students (2) Lead)

1. Trunk twister (give starting directions)
2. Kneebends
3. Straight-leg-stretchers (1-4 count)
4. Sit-ups (from 10 to 12)

Selected Activities:

Fernald School:
(17 boys)

1. Basketball (3 basketballs)
2. Jump The Shot (2, 14' ropes with old sneakers tied on one end)
3. Squat Vault (1 side horse)

Wrentham School:
(9 boys)

1. Individual Ball Activity (balls of various sizes)
2. Swinging on Rope (1 climbing rope)

Comments: (after conducting class program)

Fernald School:

1. Warm-up: Some improvement was noted in the "straight-leg-stretcher". The "trunk twister" was confusing as they had difficulty grasping the circular motion concept.

2. Basketball: Interest in this game, concerning the entire group, has become less favorable. Although most of the group began the game several dropped out along the way. The outcome concerning the activity for the group was not good.

3. Jump The Shot: This continued to be a favorable activity and some of the boys actually were beginning to do very well.

4. Squat Vault: This activity was well received and probably progressed better during this class hour than at any previous time. Some of the boys were showing good improvement and this in itself obviously helped to increase the overall interest. The instructor spotted for each boy.

Wrentham School:

1. Warm-up: Similar to Fernald (Comment No. 1)

2. Individual Ball Activity: As has been the case in the past each boy chosehis own activity with the instructor acting primarily as a mediator when disagreements did arise.

3. Swinging on Rope: Again the boys were allowed to stand on the bottom step of the bleacher and swing out and back. The instructor allowed several boys who obviously could handle the skills to do this several times in succession.

Free Play Program
Class XVI:

Class Organization:	Time Allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up Activities (open formation)	4--6 min.
3. Selected Activities	28-32 min.
4. Evaluation Phase	

Warm-up Activity: (Instructor and Students (2) Lead)

1. Head, shoulders, knees and toes (follow the leader)
2. Trunk twister (1-4 count or verbal)
3. Straight-leg-stretchers
4. Sit-ups (from 12 to 14)

Selected Activities:

Fernald School:
(17 boys)

1. Jump The Shot (2, 14-16' ropes with old sneaker tied on end)
2. Weight Lifting (various weights)
3. Tag

Wrentham School:
(9 boys)

1. Baseball (2 plastic bats, 2 balls and several gloves)
2. Circle Soccer (1 soccer ball)
3. Tag
4. Races

Comments: (after conducting class program)

1. Warm-up: "Head, shoulders, knees and toes" remained very popular and the boys like to shout the words. Although the performances in the "straight-leg-stretcher" and the "sit-ups" showed slight improvement, those in the "trunk twister" generally did not. Much patience is required if this particular activity is to become successful for usage with the educable mentally retarded boy.

2. Jump The Shot: Again this activity was well received by the boys. As usual the instructor organized them into two circles and competetion was sporadic.

3. Weight Lifting: There were several "home-made" weights in the equipment and supply room and the boy making the choice wanted to group to use them. This was allowed but only under close supervision by the instructor. Everyone tried it at least once and certainly the activity must be rated as successful.

4. Tag: This was the conventional variety and progressed reasonably well. Perhaps it represented too much running for so late in the period.

1. Warm-up: Similar to Fernald (Comment No. 1)

2. Baseball: This represented a rare show of "togetherness" by this group. The game progressed fairly well and the boys were willing to play their respective fielding positions.

3. Circle Soccer: One circle was formed and they kicked the ball in and around to each other. The boys enjoyed the activity.

4. Tag: About half of the boys really participated while the others looked on. The instructor found it necessary to discontinue the activity.

5. Races: The boy who made the selection actually organized the various races and started them himself. The outcomes were reasonably good with most of them participating.

Free Play Program
Class XVII:

Class Organization:	Time Allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up Activities (open formation)	4--6 min.
3. Selected Activities	28-32 min.
4. Evaluation Phase	

Warm-up Activity: (Instructor and Students (2) Lead)

1. Head, shoulders, knees and toes
2. Scramble (verbal directions)
3. Trurk twister
4. Sit-ups (from 12 to 15)

Selected Activities:

Fernald School:
(17 boys)

1. Line Soccer (2 soccer balls)
2. Basketball (3 basketballs)
3. Follow The Leader

Wrentham School:
(9 boys)

1. Hot Ball Soccer (2 soccerballs)
2. Touch It If You Can (2 soccerballs)
3. Jail Tag
4. Freeze Tag
5. Baseball (2 plastic bats, 2 balls and a variety of gloves)

Comments: (after conducting class program)

1. Warm-up: The "scramble" proved to be another very well received activity and this along with the equally effective "head, shoulders, knees and toes," seemed to help increase the level of performance in the more difficult "trunk twister" and "straight-leg-stretcher."

2. Line Soccer: This was a successful activity with good interaction and all of the group participating.

3. Basketball: With about four exceptions the game progressed reasonably well. The dissenters were allowed to utilize the spare balls on the sidelines.

4. Follow The Leader: This consisted of moving around the area in a single-file line and was culminated by rolling on the tumbling mat which was in a corner of the play area. No disciplinary problems occured and the boys generally enjoyed the activity.

5. General: It should be stated here that some of the boys simply cannot stand out front and aid the instructor in leading the warm-up activities.

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1. Warm-up: Similar to Fernald (Comment No. 1)

2. Hot Ball: This was suggested by the instructor along with "Touch It If You Can" when the boy could not come up with a suggestion of his own. One circle was formed and the group did enjoy the activity although at least two of the boys continually kicked the ball too hard and too high.

3. Touch It If You Can: Again a circle was formed with one boy in the middle. It is significant that the same major problem occured here as did in both the Skill-Oriented and Play-Oriented groups, that being for many boys to deliberately kick the ball to the boy in the middle.

4. Jail Tag: This activity was successful but only for a limited time as these boys characteristically do not continue well with running games.

5. Freeze Tag: The concept was difficult for some of the boys to grasp and with so few in the group the activity did not progress well.

6. Baseball: This extremely popular activity was again selected and like the previous class hour the game did progress reasonably well with most of the boys participating. Quite obviously they were becoming quite adept having played it so many times. This was particularly true concerning those who would not participate at all at first.

Free Play Program
Class XVIII:

Class Organization:	Time Allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up Activities (open formation)	4--6 min.
3. Selected Activities	28-32 min.
4. Evaluation Phase	

Warm-up Activity: (Instructor and Students (2) Lead)

1. Head, shoulders, knees and toes
2. Scramble
3. Trunk twisters
4. Squat-thrusts (1-4 count)

Selected Activities:

Fernald School:
(17 boys)

1. Basketball (3 basketballs)
2. Tag
3. Basketball (3 basketballs)
4. Animal Races

Comments: (after conducting class program)

1. Warm-up: The "squat thrusts" were more enthusiastically received by the boys this time and carry-over was evident. The "trunk twisters" remained difficult and did contribute to some frustration.

2. Basketball: The usual pattern developed with approximately three-quarters of them playing a game while the others utilized balls on the sideline area. The outcomes were projected as only fair. Minor disciplinary problems did occur and action had to be stopped frequently.

3. Tag: Most of the boys participated here and the outcome was quite good. They stayed with it for the alloted time.

4. Basketball: In being brought back for a second time many of the boys simply did not remain sufficiently interested in the activity and the instructor saw fit to discontinue the game after only a few minutes.

5. Animal Races: Although the time allowed for this activity was shorter than usual the races did appeal to the boys and were generally successful.

Wrentham School:
(9 boys)

1. Baseball (2 plastic bats, 2 balls and a variety of gloves)
2. Tag
3. Individual Activities (balls, chinning bar and climbing rope)

1. Warm-up: Similar to Fernald (Comment No. 1)

2. Baseball: The "daily favorite" was not as well received and approximately one-half of the boys participated. The others were content to watch.

3. Tag: This activity progressed reasonably well but after a time the boys began to drop out of competition. Again, they did not have the desire to continue for a sustained period with an activity which required a considerable amount of running.

4. Individual Activities: What began as a basketball contest quickly turned into an individual activity period. Two boys went to the chinning bar while two others wanted to swing on the rope. The balance of the group played with basketballs or volley balls.

Free Play Program
Class XIX:

Class Organization:	**Time Allotment:**
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up Activities (open formation)	4--6 min.
3. Selected Activities	28-32 min.
4. Evaluation Phase	

Warm-up Activity: (Instructor and Students (2) Lead)

1. Head, shoulders, knees and toes
2. Side-straddle-hop (1-2 count or clap-slap)
3. Scramble
4. Squat thrusts

Selected Activities:

Fernald School:
(17 boys)

1. Basketball (3 basketballs)
2. Squat Vault (1 side horse)
3. Tag

Comments: (after conducting class program)

1. Warm-up: The "side-straddle-hop" like the "squat thrust" was handled quite well. Regarding these activities it can be stated here that the educable mentally retarded boy, at least those involved in this study, does appear to lack coordination and/or the attention to detail moreso than the so-called normal boy. This is not to suggest that repeated practice under favorable conditions would not aid the retardate in improvement of coordination.

2. Basketball: Participation by the group as a whole in the basketball game dropped off sooner than usual. It is quite possible that "basketball" as an activity is finally reaching a so-called saturation point.

3. Squat Vault: A return to this activity after a considerable span of time found the boys quite interested. The instructor had them form one line while he spotted for each boy. The ability in this activity is definitely improving.

4. Tag: This was the conventional-type tag and most of the boys did participate. It provided a good opportunity for them to "blow off steam" and this they did. Three boys chose to sit down and observe the others in action.

Wrentham School:
(9 boys)

1. Baseball (2 plastic bats, 2 balls and a variety of gloves)
2. Squat Vault (1 side horse)

1. Warm-up: Similar to Fernald (Comment No. 1)

2. Baseball: With an unusually high interest this activity consumed approximately one-half of the alloted time. Each boy had the opportunity to hit the ball at least once and each of them did play a fielding position when their team was not batting.

3. Squat Vault: This was the first time that these boys had selected this activity despite the fact that the side horse had been visible during every class hour. Although the maneuver was quite difficult for most, spotting by the instructor helped to make it a more successful activity.

Free Play Program
Class XX:

Class Organization:	Time Allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up Activities (open formation)	4--6 min.
3. Selected Activities	28-32 min.
4. Evaluation Phase	

Warm-up Activity: (Instructor and Students (2) Lead)

1. Side-straddle-hop
2. Scramble
3. Squat thrusts
4. Running in place (vary the pace)

Selected Activities:

Fernald School:
(17 boys)

1. Basketball (3 basketballs
2. Straddle Vault (1 buck)
3. Tag

Wrentham School:
(9 boys)

1. Punching Beachballs (3 large circumference beach balls)
2. Individual Activities (various balls, horizontal bar, plastic bat and ball)

Comments: (after conducting the class program)

1. Warm-up: "Running in place" was again well accepted as a warm-up activity. This along with the other three scheduled during this class hour constituted the most successful combination utilized thus far.

2. Basketball: Participation today was much improved over the preceeding class hour. The instructor noted that individual skills such as dribbling were beginning to show improvement through the continued experience in this free-play activity.

3. Straddle Vault: This was successful for three-quarters of the group. The others either watched from the bleachers or stayed in the line but refused to attempt it when it was their turn to do so.

4. Tag: The participation in this activity was excellent and they kept going strong until the period ended.

5. It is interesting that conventional tag would receive such a "play" and to see such a high interest concerning same. Apparently the running plus the opportunity to be "it" has much bearing on the success of the activity.

1. Warm-up: Similar to Fernald (Comment No. 1)

2. Punch The Beachballs: These balls were introduced to the Play-Oriented Group for the first time and of course were also available for this group. They enjoyed them immensely and the instructor was able to organize about three small groups. Basically they would attempt to hit them back and forth to each other.

3. Following the beachball episode it was virtually impossible to get them reorganized so that another choice could be made, thus an individual activity period was allowed. Two boys attempted their own baseball game while two others worked on the chinning bar. The others worked with balls of various sizes.

Free Play Program
Class XXI:

Class Organization:	Time Allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up Activities (open formation)	4--6 min.
3. Selected Activities	28-32 min.
4. Evaluation Phase	

Warm-up Activity: (Instructor and Student Lead)

1. Arm circles (start small, then large)
2. Side-straddle-hop
3. Windmill (give direction, 1-4 count)
4. Squat thrusts
5. Running in place

Selected Activities:

Fernald School:
(17 boys)

1. Follow The Leader (2, 5' x 10' x 2" tumbling mats)
2. Bowling (2 sets wooden bowling pins and 2 small bowling balls)

Wrentham School:
(9 boys)

1. Punch The Beachballs (3 large circumference beachballs)
2. Individual Activities (horizontal bar, climbing rope and a variety of balls)

Comments: (after conducting class program)

1. Warm-up: This was the class hour where five warm-up activities were included instead of the usual four. Although the boys showed no signs of even realizing this change it did mean that the instructor had to be more cognizant of his available time.

2. Follow The Leader: This activity was highly successful as the boy selecting it was particularly adept concerning some of the very basic tumbling skills and did lead the group well for the entire ten minute period.

3. Bowling: Although bowling pins and balls had been in the storeroom since the beginning of the study this marked the initial request for same. The instructor formed two relay groups and they competed against one another to see which team could knock down all of the pins first. They became so engrossed in this activity that it was selected a second time.

1. Warm-up: Similar to Fernald (Comment No. 1)

2. Punch The Beachballs: As was true during the previous class hour this proved to be a very successful activity. Again three groups were organized and for the most part the boys in each group tried their hand at keeping the ball in the air.

3. Individual Activity: This too represented a follow-up from the previous class hour. As usual the boys preferred to act on their own initiative. Playing with individual balls was the most popular activity and the instructor in numerous cases had to act as a mediator in determining which ball belonged to whom.

Free Play Program
Class XXII:

Class Organization:	Time Allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up Activities (open formation)	4--6 min.
3. Selected Activities	28-32 min.
4. Evaluation phase	

Warm-up Activity: (Instructor and Student Lead)

1. Arm circles
2. Side-straddle-hop
3. Windmill
4. Push-ups(regular, from 6 to 8 on individual basis)
5. Running in place

Selected Activities:

Fernald School:
(17 boys)

1. Bowling (2 sets of wooden pins and 2 small bowling balls)
2. Tumbling (2, 5' x 10' x 2" tumbling mats)

Comments: (after conducting class program)

1. Warm-up: The regular "push-up" proved difficult for the majority but seemingly there were more efforts made than had been evident during the initial class hours when the modified version was attempted. "Arm circles" were successful if the instructor was careful in giving verbal directions as to how large the circles should become.

2. Bowling: This activity was selected by two consecutive boys and the outcomes were quite favorable. It was "remarkable" as to how well the boys remained within their two respective relay lines. It was also interesting to learn that several boys were very anxious to be "pin-setters" and because of this desire was able to solve some minor disciplinary problems by assigning certain boys to this task on a rotation basis.

3. Tumbling: The boy making the choice wanted to tumble. He was asked by the instructor to demonstrate what he wanted the boys to attempt. Participation here was spotty and many boys chose merely to sit by and watch the others perform

Wrentham School:
(9 boys)

1. Punch The Beachballs (3-4 large circumference beachballs)
2. Individual Activities (individual jump ropes, basketballs, soccer balls, and footballs)

1. Warm-up: Similar to Fernald (Comment No, 1)

2. Punch The Beachballs: This followed generally the same procedure of the previous two class hours with the large balls providing the basis for much entertainment. Most of the boys did participate and the outcomes were favorable.

3. Individual Activities: Each boy was again allowed to select his own activity. It was interesting that several of them again attempted to "jump rope." Problems did arise here when a couple of the boys started to swing the ropes (wooden handles) haphazardly. Two other boys were very much engrossed in kicking and/or passing the football and had to be cautioned not to deliberately strike the ceiling.

Free Play Program
Class XXIII:

Class Organization:	Time Allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up Activities (open formation)	4--6 min.
3. Selected Activities	28-32 min.
4. Evaluation Phase	

Warm-up Activity: (Instructor and Student Lead)

1. Arm circles
2. Windmill
3. Lift em and spread em (verbal direction)
4. Push-ups (from 7 to 9 on ind. basis)
5. Running in place

Selected Activities:

Fernald School:
(17 boys)

1. Bowling (2 sets of wooden pins and two small bowling balls)

Wrentham School:
(9 boys)

1. Beachball Keep It Up (3 large circumference beachballs)
2. Throw and Kick The Football (3 footballs)
3. Individual Activities (beachballs, light-weight balls, horizontal bar, climbing rope and plastic bat and ball)

Comments: (after conducting class program)

1. Warm-up: For the most part, the same problems occured with the "lift em and spread em" activity which did previously. It is recommended that the boys be instructed to pat their stomachs lightly. This innovation did provide added motivation and helped to keep the legs at a lower height from the floor.

2. Bowling: This very popular activity was selected consecutively by three boys and thus was continued for the entire class hour. The two relay teams were again utilized and the outcomes were excellent with only one boy not wanting to participate.

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4. Individual Activities: Again the boys preferred their individual choices and were allowed to go their own ways. Two of them had a baseball game, two others swung on the rope, two more climbed or hung on the horizontal bar while the others played with various balls.

1. Warm-up: Similar to Fernald (Comment No. 1)

2. Beachball Keep It Up: When the boy whose turn it was failed to make a definite choice the instructor gave him the alternatives which parallelled those included in the Play-Oriented Program for that same class hour. As a result seven boys participated reasonably well from within a circle formation. The major problem which did occur was striking the ball too hard and thus someone, usually two or three boys, would run wildly after it.

3. Throw and Kick The Football: The boy making the choice wanted everyone to play with the footballs. As a result, some played catch and others tried to kick it. The activity, although rather hectic, did involve participation by most of the boys.

Free Play Program
Class XXIV:

Class Organization:	Time Allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up Activities (open formation)	4--6 min.
3. Selected Activities	28-32 min.
4. Evaluation Phase	

Warm-up Activity: (Instructor and Student Lead)

1. Arm circles
2. Windmill
3. Lift em and spread em
4. Push-ups (from 8 to 10 on ind. basis)
5. Rope jumping mimetics (alter the pace and the type of jump)

Selected Activities:

Fernald School:
(17 boys)

1. Bowling (2 sets of wooden pins and two small bowling balls)

Wrentham School:
(9 boys)

1. Bowling (2 sets of wooden pins and two small bowling balls)
2. Individual Activities (basketballs, climbing rope and footballs)

Comments: (after conducting class program)

1. Warm-up: Rope jumping mimetics in being brought back for a second time proved again to be extremely popular with the boys. While the "arm circles" and "windmill" progressed reasonably well general lack of upper arm strength and motivation did continue to adversely affect performances in the "push-ups"

2. Bowling: The popularity of this activity continued to be just short of amazing. The opportunity for each boy to have the "big chance" of knocking over the pins obviously contributed to the general excitement generated by this relay contest.

1. Warm-up: Similar to Fernald (Comment No. 1)

2. Bowling: This marked the initial choice for bowling at this school and at the outset it appeared that the activity would be successful. However, it was not long before most of the boys became relatively disinterested obviously due to the standing around which was involved with the two relay groups. The outcomes of this activity were not rated as "favorable.'

3. Individual Activities: Again this was the choice of the majority. It was interesting that four boys continued to bowl while the others played with basketballs, footballs or swung on the rope.

Free Play Program
Class XXV:

Class Organization:	Time Allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up Activities (open formation)	4--6 min.
3. Selected Activities	28-32 min.
4. Evaluation Phase	

Warm-up Activity: (Instructor and Student Lead)

1. Arm circles
2. Wing-flapper (give direction,1-4 count)
3. Lift em and spread em
4. Push-ups (from 9 to 10 on ind. basis)
5. Rope jumping mimetics

Selected Activities:

Fernald School:
(17 boys)

1. Evaluation
   1. Serving Into Hole
   2. Shooting At Big Eye
   3. Individual Volley

Comments: (after conducting class program)

1. Warm-up: Carry-over concerning the "wing-flapper" activity was evident, however, it was still relatively difficult for most of the boys to understand and/or remember the four doordinated movements which were involved.

2. Evaluation: The lack of detail concerning the various skills was quite evident and performances generally were far below those turned in by many of the boys in the Skill-Oriented and Play-Oriented Programs. The most favorable outcomes were with the "individual volley" while they found considerable difficulty with kicking the soccer ball accurately and were generally frustrated in attempting to serve the volleyball successfully.

   It was quite obvious as a result of this simple measurement device that these boys must be subjected to meaningful exposure concerning these skills if they are expected to perform in even a minimal manner.

Wrentham School:
(9 boys)

1. Evaluation
   (Same as Fernald)

1. Warm-up: Similar to Fernald (Comment No. 1)

2. Evaluation: Like the experience of the Fernald School it was obvious that these boys could not be reasonably expected to perform these specific skills (serving, kicking for accuracy and the individual volley). Unlike the Fernald outcomes they performed more favorably in kicking for accuracy (Big Eye) while the performances in the other two were very much below that level achieved by either of the other two groups at the same school

Free Play Program
Class XXVI:

Class Organization:	Time Allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up Activities (open formation)	4--6 min.
3. Selected Activities	28-32 min.
4. Evaluation Phase	

Warm-up Activity: (Instructor and Student Lead)

1. Wing-flapper
2. Rope jumping mimetic
3. Lift em and spread em
4. Push-ups (at least 10 on ind. basis)
5. Chu-chu train (treadmill, imitate sounds)

Selected Activities:

Fernald School:
(17 boys)

1. Kickball Baseball (2 soccer balls, slightly deflated)
2. Bowling (2 sets of wooden pins and 2 volley balls)

Wrentham School:
(9 boys)

1. Animal Walk Parade
2. Basketball (2 basketballs)
3. Rope Swinging (climbing rope and tumbling mat)
4. Beachball Keep It Up (2-3 large circumference beachballs)

Comments: (after conducting class program)

1. Warm-up: The "chu-chu train" was well received. They enjoy imitating a train while performing the activity. Performances in the "wing flapper" were somewhat improved over the previous class hour.

2. Kickball Baseball: This team game progressed very well and the outcomes were termed as "good." All but one of the boys did participate.

3. Bowling: Two boys made this their choice despite the fact that the regular balls had been misplaced. Volleyballs were substituted and actually worked out quite well.

1. Warm-up: Similar to Fernald (Comment No. 1)

2. Animal Walk Parade: This was one of the alternatives suggested by the instructor when the boy whose choice it was could not decide. For a short time this progressed very well but then they did tire and stopped to watch the others. The "lame dog", the "dog run", the "seal crawl", and the "crab walk" were utilized.

3. Basketball: Six boys consented to try a game while the others watched from the side lines. They disliked officiating on the part of the instructor and this coupled with very poor skills and/or understanding of the game rendered an unfavorable outcome.

4. Rope Swing: A rolled mat was used as an "obstacle" for them to swing over. This added motivating device brought more interest than usual and most of the boys did participate.

5. Beachball Keep It Up: Although participation was generally favorable the time was limited for this activity.

Free Play Program
Class XXVII:

Class Organization:	**Time Allotment:**
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up Activities (open formation)	4--6 min.
3. Selected Activities	28-32 min.
4. Evaluation Phase	

Warm-up Activity: (Instructor and Student Lead)

1. Wing flapper (1-4 count)
2. Rope jumping mimetics (alter the pace)
3. Windmill sitting down (have them grab their toes)
4. Lift em and spread em (pat stomachs lightly)
5. Chu-chu train (verbal)

Selected Activities:

Fernald School:
(17 boys)

1. Bowling (2 sets of wooden pins and 2 volleyballs)
2. Basketball (2 basketballs and 1 light-weight ball)
3. Volleyball Dribble and Shoot Relay (2 volleyballs)

Wrentham School:
(9 boys)

1. Baseball(2 plastic bats and balls)
2. Basketball (3-5 basketballs)

Comments: (after conducting class program)

1. Warm-up: They enjoy grabbing their toes in the "windmill sitting down" and although this was more time consuming the innovation is definitely recommended even at the expense of an orderly count.

2. Bowling: Inasmuch as the regular bowling balls still had not been found the interest in this activity did dwindle rather markedly. The instructor even found it necessary to cut the activity short!

3. Basketball: This began as a game involving about three-quarters of the boys while the others remained on the sidelines. It was not too long before others dropped out. To offset this a contest of "Keep It Up" utilizing a volleyball was organized for those who didn't wish to play basketball. This progressed well until it began to draw others away from the game and thus had to be discontinued.

1. Warm-up: Similar to Fernald (Comment No. 1)

2. Baseball: They returned to this game following a considerable "lay-off" and the outcomes were fair. There was some noticable improvement concerning some of the boys in certain isolated skills (i.e. batting)

3. Basketball: Although this began as an organized game it ended up primarily as an individual activity period involving the usage of several basketballs.

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4. Volleyball Dribble and Shoot Relay: For some reason the boy making the choice wanted to use volleyballs instead of basketballs. The request was allowed and two teams (relay) competed against one another in making "lay-ups". Each boy was given three tries and if unsuccessful was allowed to dribble the ball back and give it to the next boy in line. The activity was successful in that interest was very high and participation quite "spirited."

Free Play Program
Class XXVIII:

Class Organization:	Time Allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up Activities (open formation)	4--6 min.
3. Selected Activities	28-32 min.
4. Evaluation Phase	

Warm-up Activity: (Instructor and Student Lead)

1. Wing flapper
2. Touch toes (hands from hips)
3. Rope jumping mimetics
4. Windmill sitting down
5. Chu-chu train

Selected Activities:

Fernald School:
(17 boys)

1. Bowling (2 sets of wooden pins and 2 small bowling balls)
2. Basketball (3 basketballs)

Wrentham School:
(9 boys)

1. Baseball (2 plastic bats and 1 tennisball)
2. Rope Swinging (climbing rope and tumbling mat)
3. Basketball (several basketballs)

Comments: (after conducting class program)

1. Warm-up: The only activity which really caused difficulty was the "wing flapper." There was definite carry-over evident concerning "touch toes" which was included again after being introduced earlier.

2. Bowling: With the regular balls again available, two boys selected the bowling relay game as the activity. The participation generally was good but quite obviously some of the boys were "weary" of bowling.

3. Basketball: There was as much activity on the sidelines involving small groups as there was on the court. Many of the boys appeared to be generally disinterested in the regular game-like setting.

1. Warm-up: Similar to Fernald (Comment No. 1)

2. Baseball: A tennis ball was substituted in place of the usual plastic ball and this was easier for some of the boys to handle. The majority of them did participate and the outcomes were stated as "fair."

3. Rope Swinging: A tumbling mat was laid out width-wise to represent a "brook" for the boys to swing over. Despite this motivating device only slightly more than half of number present did actively participate.

4. Basketball: What began as an attempt at a regular game quickly turned into a shooting marathon involving at least five basketballs. These boys thus continued to generally "shun" organized team games.

Free Play Program
Class XXIX:

Class Organization:	Time Allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up Activities (open formation)	4--6 min.
3. Selected Activities	28-32 min.
4. Evaluation Phase	

Warm-up Activity: (Instructor and Student Lead)

1. Wing flapper
2. Touch toes
3. Windmill sitting down
4. Bicycle and kickover (take some time and press them to do both)
5. Chu-chu train

Selected Activities:

Fernald School:
(17 boys)

1. Bowling (2 sets of wooden pins and 2 small bowling balls)
2. Tumbling Activities (3, 5' x 10' x 2" tumbling mats)

Wrentham School:
(9 boys)

1. Baseball (2 plastic bats and balls)
2. Basketball (several basketballs)
3. Rope Swinging (climbing rope and tumbling mat)

Comments: (after conducting class program)

1. Warm-up: In the"bicycle" there was improvement in the ability of many boys to finally get their hands and elbows propped successfully under the hips. The "kickover" portion of the activity continued to be more successful as they did enjoy contacting the floor with their toes.

2. Bowling: Utilizing the now traditional "relay teams" this activity did progress quite well. Several of the boys had really become very accomplished at rolling the ball accurately.

3. Tumbling Activities: This was obviously selected because the boys on the other side of the partition were utilizing tumbling mats (PO Program). Because of the success experienced in this activity the instructor allowed it to continue throughout the duration of the available class time. The specific items selected were the forward roll, the backward roll, the head stand and finally a series of forward rolls. Although the skill levels were not of a high quality the participation was generally good and considerable enthusiasm was evident.

1. Warm-up: Similar to Fernald (Comment No. 1)

2. Baseball: Slightly more than half of the boys participated in this game which like most was generally ineffective in terms of real enjoyment and/or learning experiences.

3. Basketball: This became a "shooting" game as everyone seemed to be interested in making a basket. It was not long before several balls were being utilized.

4. Rope Swinging: The interest of those who participated (slightly more than half) was good. Again the mat was used as an "obstacle" and this innovation did aid in keeping them interested.

Free Play Program
Class XXX:

Class Organization:	Time Allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up Activites (open formation)	4--6 min.
3. Selected Activities	28-32 min.
4. Evaluation Phase	

Warm-up Activity: (Instructor and Student Lead)

1. Touch toes
2. Kneebends (1-2 count with arms straight out)
3. Windmill sitting down
4. Bicycle and kickover (should contact floor at least twenty times)
5. Chu-chu train

Selected Activities:

Fernald School:
(17 boys)

1. Bowling (2 sets of wooden pins and 2 small bowling balls)

Wrentham School:
(9 boys)

1. Baseball (2 plastic balls and bats)
2. Rope Swinging (climbing rope and tumbling mat)
3. Ball Activity (a variety of balls)

Comments: (after conducting class program)

1. Bowling: This was one of those days when the same activity was selected by three different boys. The instructor rated the typical relay contests as quite successful. It was amazing to notice how well most of the boys behaved while waiting for their turn to occur to see if they could make the pins "splatter." The biggest thrills apparently were to be either on the winning team or the boy who was responsible for ending that particular contest.

1. Baseball: This was the usual type of modified team game which met with only fair success. Despite the improvement of individuals concerning various skills there still remained this "lack of interest" in doing anything else but batting.

2. Rope Swinging: Even with the mat as an "obstacle" interest did not appear to be particularly high. Participation was, however, better than it had been previously,

3. Ball Activity: This consisted primarily of shooting, rolling, passing and catching the basketballs. The instructor moved around and did what he could to further motivate individual interest and participation.

Free Play Program
Class XXXI:

Class Organization:	Time Allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up Activities (open formation)	4--6 min.
3. Selected Activities	28-32 min.
4. Evaluation Phase	

Warm-up Activities: (Instructor and Student Lead)

1. Touch toes
2. Kneebends
3. Windmill sitting down
4. Bicycle and kickover
5. Situps (test-fashion with partner holding the ankles)

Selected Activities:

Fernald School:
(17 boys)

Due to tuberculin tests this class could not be held. Efforts to reschedule it at a later date were not successful.

Wrentham School:
(9 boys)

1. Tumbling Activity (4, 5' x 10' x 2" tumbling mats)
2. Rope Swinging (climbing rope)
3. Ball Activities (several basketballs and soccer balls)

Comments: (after conducting class program)

1. Warm-up: The boys were far more enthused about doing the regular "sit-ups" as opposed to the modified version (arms outstretched above head) which had been introduced earlier in the program.

2. Tumbling Activity: Basically this consisted of "following a leader" and for the most part included several "animal walks." Some of the boys did attempt the "forward roll." This was obviously a carry-over from what was occuring on the other side of the gymnasium (Play-Oriented Program) and the outcomes were rated as good.

3. Rope Swinging: Most of the boys did attempt this using the first bleacher as a riser and a rolled mat as an obstacle. Some of them preferred to swing back and forth as many times as possible and were permitted to do so.

4. Ball Activities: For the most part this activity consisted of individual participation with basketballs. Some did, however, relish kicking soccer balls against the gymnasium divider and one boy attempted to get his ball over the top.

Free Play Program
Class XXXII:

Class Organization:	Time Allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up Activities (open formation)	4--6 min.
3. Selected Activities	28-32 min.
4. Evaluation Phase	

Warm-up Activity: (Instructor and Student Lead)

1. Touch toes
2. Kneebends
3. Bicycle and kickover
4. Sit-ups (from 10 to 12)
5. Straight-leg-stretcher (using same partner have him stand back of other boy to see if pusher can grab his hands)

Selected Activities:

Fernald School:
(17 boys)

1. Tug-of-War (1 long nylon pool divider)
2. Basketball (4 basketballs)

Wrentham School:
(9 boys)

1. Rope Swinging (climbing rope and rolled tumbling mats)
2. Individual Activities (several footballs, basketballs and playgound balls)

Comments: (after conducting class program)

1. Warm-up: It was believed that to have one boy stand slightly behind another to force the front boy to push or reach back to touch him would constitute an effective motivational device concerning the "straight-leg-stretcher". This was not entirely true, however, as it was successful only with those boys who would have done well anyway.

2. Tug-of-War: This turned out to be a highly successful activity in terms of student enthusiasm and participation. The instructor selected two relatively evenly matched groups and they really put out in trying to overcome their opponents. It appeared that such excellent participation might have been due to the fact that individual weaknesses were not as evident in this particular activity.

3. Basketball: Approximately half of the group participated in a relatively successful game while the others involved themselves with individual activities along the sidelines.

4. General: It was significant that bowling was not selected as an activity.

1. Warm-up: Similar to Fernald (Comment No. 1)

2. Rope swinging: The interest was seemingly higher during this activity than it had ever been in the past and because of this the instructor allowed it to continue as long as possible. Participation was good and the rolled mat concept did aid in motivating them. Toward the end of the activity two rolled mats were utilized and this seemed to provide even a greater challenge to most of them.

3. Individual Activities: Inasmuch as agreement could not be reached on anything, including those suggestions by the instructor, the boys were allowed to do what they wanted. The basketballs were again the most popularly used item with footballs and playground balls following closely behind.

Free Play Program
Class XXXIII:

Class Organization:	Time Allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up Activities (open formation)	4--6 min.
3. Selected Activities	28-32 min.
4. Evaluation Phase	

Warm-up Activities: (Instructor and Student Lead)

1. Head, shoulders, knees and toes
2. Kneebends
3. Bicycle and kickover
4. Sit-ups (from 12 to 15)
5. Straight-leg-stretchers (continue to use partners)

Selected Activities:

Fernald School:
(17 boys)

1. Tumbling Activities (3, 5' x 10' x 2" tumbling mats)
2. Animal Walk Races

Wrentham School:
(9 boys)

1. Baseball (2 plastic bats and balls with various gloves)
2. Rope Swinging (climbing rope and two rolled tumbling mats)
3. Individual Activities (horizontal bar, basketballs and beachballs)

Comments: (after conducting class program)

1. Warm-up: Aside from the "straight-leg-stretcher" which improved very little the other activities were each performed in at least a satisfactory manner by a majority of the boys.

2. Tumbling Activities: Approximately the same tumbling skills were selected that had been utilized during a recent class (i.e. forward and backward rolls, head stand and forward roll in a series). The participation was excellent and the instructor evaluated the activity as "just great."

3. Animal Walk Races: Like the tumbling activities above the participation and enthusiasm concerning these races was very favorable. The races involved the "dog run," "lame dog run," and the "crab walks."

4. General: These activities represented a "carry-over" from what the other boys were or had been doing on the other side of the divided gymnasium at the same time (Play-Oriented).

1. Warm-up: Similar to Fernald (Comment No. 1)

2. Baseball: They returned to their old "stand-by" and the participation was relatively good. Using the gloves did seem to motivate some of the boys to try harder at fielding the ball.

3. Rope Swinging: Although the participation was not as effective as the previous day it was obvious that most of these boys had become very interested in this as an activity.

4. Individual Activities: Three boys climbed or hung on the horizontal bar while at least three others batted two beachballs about. The balance of the group used basketballs.

5. General: The incidence of climbing illustrated by members of this group from time to time indicates that more experimentation might well be considered in this area.

Free Play Program
Class XXXIV:

Class Organization:	Time Allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up Activities (open formation)	4--6 min.
3. Selected Activities	28-32 min.
4. Evaluation Phase	

Warm-up Activity: (Instructor and Student Lead)

1. Head, shoulders, knees and toes
2. Scramble (avoid going from feet to back)
3. Kneebends
4. Sit-ups (from 15 to 17)
5. Straight-leg-stretchers (partners are optional)

Selected Activities:

Fernald School:
(17 boys)

1. Bulls Eye Barrel (2 large pasteboard barrels and 2 basketballs)
2. Basketball Bowling (2 basketballs)
3. Basketball (3 basketballs)

Wrentham School:
(9 boys)

1. Trampoline (1 trampoline)

Comments: (after conducting class program)

1. Warm-up: It was again noticable that in having two very popular activities consecutively (head, shoulders, knees and toes, and scramble) that the momentum seemingly carried over to the others.

2. Bulls Eye Barrel: Two relay groups were utilized. The idea was to see which team could get the ball into the barrel the most times. The excitement ran high but so did frustration in a couple of instances as one boy tossed the barrel against a window the breaking of which caused much excitement.

3. Basketball Bowling: The basketballs were used in preference to the bowling balls to knock over the pins but interest generally waned rather quickly concerning this as it became too easy to knock over the pins and took too long to have them set up again.

4. Basketball Game: Two baskets were utilized and the group was divided into four teams for two games. For the most part the participation was good and the outcomes were classed as successful.

1. Warm-up: Similar to Fernald (Comment No. 1)

2. Trampoline: With the trampoline again in the gymnasium the first boy requested that they jump on it. They spent the entire class hour here as subsequent choices also favored using it. All other balls were locked up so that the group would remain around the trampoline.

3. General: There was so much "standing around" involved with the above activity and disciplinary problems do generally occur more readily. It was difficult for the instructor to handle these and still be primarily concerned about individual student safety at the same time.

Free Play Program
Class XXXV:

Class Organization	Time Allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up Activiities (open formation)	4--6 min.
3. Selected Activities	28-32 min.
4. Evaluation Phase	

Warm-up Activity: (Instructor and Student Lead)

1. Head, shoulders, knees and toes
2. Scramble
3. Sit-ups (from 17 to 20)
4. Straight-leg stretchers (use partners)
5. Squat thrusts (1-4)

Selected Activities:

Fernald School
(17 boys)

1. Tumbling Activities (3 5x10x2" tumbling mats)
2. Tug-of-War (1 long ½" rope)
3. Basketball (3 basketballs)

Wrentham School
(9 boys)

1. Jump on Trampoline (1 trampoline)
2. Ball Activity and Rope Swinging (a variety of balls and 1 climbing rope)

Comments: (After conducting the class program)

1. Warm-up: That the instrctor wanted the boys to achieve at least twenty "push-ups" was met with "mixed emotion".
2. Tumbling Activities: These were a combination of the two basic rolls and animal walks. The participation was considered good and the outcomes satisfactory.
3. Tug-of-War: The activity itself served as an effective motivational device. The participation was excellent.
4. Basketball: Approximately three out of four participated in this game while the others kept themselves occupied along the sidelines. Interest was not as keen toward this activity as it has been at some times.

1. Warm-up: Similar to Fernald (No. 1.)

2. Trampoline: They selected this quickly as it was nearby and open! The instructor let each boy have one turn and when cooperation failed to materialize regarding spotting he folded it up and they moved on to another activity.
3. Ball Activity and Rope Swinging: They were divided as a group on what they should do so the instructor allowed them to go their own way. Five of the boys worked with individual ropes and then with a long "swinging rope". One boy was content to swing his rope as a lariet. The other five boys were content to play with balls of various sizes. Actually the group as a whole worked rather well at what they had chosen to do and a minimum of confusion did exist.

Free Play Program
Class XXXVI:

Class Organization:	Time Allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up activities (open formation)	4--6 min.
3. Selected activities	28--32 min.
4. Evaluation phase	

Warm-up Activities: (Instructor and Student Lead)

1. Head, shoulders, knees and toes
2. Scramble
3. Side-straddle-hop (1-2 or clap slap)
4. Straight-leg-stretcher (use partner)
5. Squat thrusts

Selected Activities

Fernald School:
(17 boys)

1. Bowling (2 small balls and 2 sets of wooden pins)
2. Rope Climbling (1 climbing rope)
3. Individual Ball Activities (balls of various sizes)

Wrentham School:
(9 boys)

1. Jumping on Trampoline (1 trampoline)
2. Baseball and Individual Ropes (2 plastic bats and balls, several ind. jump ropes)
3. Rope Swinging (1 climbing rope)

Comments: (After conducting the class program)

1. Warm-up: The "side-straddle-hop" included now for the third progression presented very little problem for most of the boys.
2. Bowling: Again this popular activity was selected (the balls had been mislaid during the previous class hour) and it went exceedingly well with the two relay teams.
3. Rope Climbing: A climbing rope had been installed on their side of the gymnasium and the second choice of the day was to climb it! They behaved well as a group while waiting their turns and most of them ended up "swinging" on the rope instead or climbing it while bracing their feet on the wall.
4. Individual Ball Activities: This was one of the rare occasions when several balls of various descriptions were utilized. It was interesting to observe the individuals, couples and/or small groups as they organized their various activities. The outcomes were regarded as good.

1. Warm-up: Similar to Fernald (No. 1.)

2. Trampoline: The trampoline was requested and again it was folded up after every boy had received an opportunity to jump on it. The cooperation concerning the spotting responsibilities was poor.
3. Baseball and Individual Jump Ropes: As had been true during the previous class hour the interest for the individual rope jumping by the same boys was quite keen! The others joined in a modified game of baseball which did not progress as well as did the rope jumping.
4. Rope Swinging: The entire group was willing to swing on the climbing rope using the low bleachers as a "jumping off" point. The participation was reasonably good.

Free Play Program
Class XXXVII:

Class Organization:	Time Allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up activities (open formation)	4--6 min.
3. Selected activities	28--32 min.
4. Evaluation phase	

Warm-up Activities: (Instructor and Student Lead)

1. Head, shoulders, knees and toes
2. Scramble
3. Side-straddle-hop
4. Running in place (alter the pace)
5. Squat thrusts

Selected Activities:

Fernald School:
(17 boys)

1. Basketball (3 basketballs)
2. Bowling (2 small balls and 2 sets of wooden pins)

Wrentham School:
(9 boys)

1. Baseball (2 plastic bats and balls and a variety of gloves)
2. Rope Swinging (1 climbing rope)
3. Individual Ball Activities (variety of balls)

Comments: (After conducting the class program)

1. Warm-up: No comment
2. Basketball: The participation was much better today than it had been previously in this activity. Very few boys chose to remain on the sidelines and the outcomes were regarded as good.
3. Bowling: This was selected by two consecutive boys and the participation was good. As has been mentioned previously many of these boys have become quite accomplished at bowling and fewer arguments seem to be occuring relative to who is winning or setting the pins.

1. Warm-up: No comment
2. Baseball: Most of the boys did participate but some still balk at doing anything other than batting! The gloves do help to motivate some of them to participate.
3. Rope Swinging: Again they selected this as an activity and like the previous class hour they did, for the most part, participate as a group. Two rolled mats were used as obstacles to provide greater motivation.
4. Individual Ball Activities: Almost every boy had his own ball and there was much excitement within the playing area. The instructor moved about the floor assisting where he could.

Free Play Program
Class XXXVIII:

Class Organization:	Time Allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up activities (open formation)	4--6 min.
3. Selected activities	28--32 min.
4. Evaluation phase	

Warm-up Activities: (Instructor and Student Lead)

1. Scramble
2. Windmill (1-4)
3. Side-straddle-hop
4. Running in place
5. Squat thrusts

Selected Activities:

Fernald School:
(17 boys)

1. Individual Activities (balls, ropes, toys)

Wrentham School:
(9 boys)

1. Baseball (2 plastic bats and balls and a variety of gloves)
2. Rope Swinging (1 climbing rope)
3. Follow The Leader (2, 12' bal. beams)
4. Individual Ball Activities (variety of balls)

Comments: (After conducting the class program)

1. Warm-up: No comment

2. Individual Activities: The instructor allowed the boys to do anything they wanted to do as long as they behaved and stayed within the confines of the play area. As is true at Wrentham much of the time, "noise and confusion" were in abundance. They pulled almost everything out of the storage closet and this included many riding toys along with a variety of balls and ropes. The outcomes were regarded as favorable and none of the boys balked at the "individual"opportunity.

1. Warm-up: No comment

2. Baseball: Again the real participation involved approximately half of the group while the others did not contribute a great deal to the game at all. The outcomes were regarded as only fair.
3. Rope Swinging: This activity selected now for several consecutive days held the group together reasonably well and the outcomes of the "swinging" were regarded as favorable.
4. Follow The Leader: The balance beams were utilized and generally the activity was highly successful. They really enjoyed trying to stay atop the beams which were flat on the floor.
5. Individual Ball Activities: Again the class hour terminated with most of the boys having a ball of his own. Two boys had old brooms and were sweeping the floor!

Free Play Program
Class XXXIX

Class Organization:	Time allotment:
1. Roll call and personal inspection (line formation)	2--4 min.
2. Warm-up activities (open formation)	4--6 min.
3. Selected activities	28--32 min.
4. Evaluation phase	

Warm-up Activities (Instructor and Student Lead)

1. Arm circles (start small and go to large, return)
2. Side-straddle-hop
3. Windmill
4. Running in place
5. Squat thrust

Selected Activities:

Fernald School:
(17 boys)

1. Obstacle Course
   (8 tumbling mats 5'x10'x2")
   (1 balance beam elevated)
   (6 folding chairs or cones)
   (1climbing rope)

Wrentham School:
(9 boys)

1. Obstacle Course (see Fernald # 1.)
   Order of Obstacles:
   a. Forward Roll
   b. Walk forward on raised beam
   c. Dog run (zig-zag through chairs)
   d. Dive and roll over rolled mat
   e. Log rolling
   f. Swing over the brook (rope)
   g. Jump and turn ($\frac{1}{2}$)
   h. Backward roll
   i. Crab walk to finish line.

Comments:(After conducting class program)

1. Warm-up: No comment relative to either group.

2. Obstacle Course: This was very well received by both groups but particularly at the Fernald School. The competition was very keen despite the fact that these boys had not been exposed in any depth at least to most of the items included. Like the boys in the other two types of programs they were each timed and evaluated. A "three second" penalty was applied for each obstacle which was missed and many were quite concerned about this innovation.

   The outcomes of this evaluation were not favorable when compared to the outcomes of the Skill-Oriented Group, however, the enthusiasm was very high concerning the activity. It is recommended that "obstacle courses" **such** as this one be encouraged for programs of this nature.

CHAPTER VII

PRESENTATION OF THE DATA

A. Introduction:

In terms of the major study fifty-two boys at the Fernald State School and thirty-two boys at the Wrentham State School were administered the fourteen test items* which comprised the AAHPER Youth Fitness Battery and the Latchaw Motor Achievement Test at the outset of the study and again following completion of the instructional program. These boys had earlier been placed into one of three groups,at each school, based on selection via a recognized procedure concerning a random table of numbers**.

The specific test items from the AAHPER and Latchaw instruments, already stated in Chapter I, are not reproduced here as they will appear in tables which follow. The same is true concerning the Social Adjustment evaluation which was completed following the seventh class hour and again at the completion of the study.

B. Statistical Techniques:

As it has already been stated in Chapter I, the analysis of variance and co-variance techniques were utilized to determine the difference in the results of the pre and post testing. The 5% level of confidence, generally acceptable in educational circles, was the determinant in considering whether or not significant differences did exist.

It was further determined that raw performances and/or scores would be utilized for determining statistical outcomes instead of their being converted to standard scores which had been called or in the earlier stages of the study. This decision was made primarily because real differences could be more specifically pinpointed.

Basically this study, as already stated via the null-hypotheses found in Chapter I. (p. 3.), was concerned with:

1. Whether specific groups(assigned to particular types of physical education programs)at each school would indicate a significant improvement,at the 5% level of confidence,in each item following completion of the post tests relating to physical fitness, motor ability and social adjustment and;

2. Whether one group.(assigned to a specific type of program) at each school would differ significantly,at the 5% level of confidence,from the others following completion of the post tests.

* Because the procedures involving the standing broad jump were the same in both instruments this item was administered only once.

** Wert, James E., Charles O.Neidt and Stanley Ahmann. Statistical Methods In Educational and Psychological Research. New York:Appleton-Century-Crofts, Inc., 1954. pp. 109-110 and 416-417.

C. Percentage Improvement Tables:

The raw scores, per se, do appear in the appendix in concise form. There are too many boys and scores for same to be presented in a feasible manner here. However, inasmuch as th crux of this study, especially regarding the three types of physical education programs is dependent upon improved performances relative to each test item the following tables denoting such improvement, on a percentage basis, are presented.

TABLE A-1
PERCENTAGE IMPROVEMENT TABLE
FERNALD SCHOOL

Test Item:	Status:	(Raw) SO	%	(Raw) PO	%	(Raw) FP	%	Total	%	Rank	%
AAHPER: Sit-Ups	Improve	12	70.6	15	93.8	11	64.7	38	76.	3	
	Same	1		0		1		2			
	Regress	4		1		5		10			
Pull-ups	Improve	7	41.2	1	06.3	2	11.8	10	20.	14	
	Same	10		12		8		30			
	Regress	0		3		7		10			
Shuttle Run	Improve	14	82.4	14	87.5	8	47.0	36	72.	5.5	
	Same	0		0		0		0			
	Regress	3		2		9		14			
25 Yard Dash	Improve	7	41.2	7	43.8	13	76.5	33	66.	9.5	
	Same	3		4		2		4			
	Regress	7		5		2		13			
Softball Throw	Improve	11	64.7	10	62.5	13	76.5	34	68.	7.5	
	Same	1		0		0		1			
	Regress	5		6		4		15			
600 Yd. Run-Walk	Improve	15	93.8	10	62.5	13	76.5	38	76.	3	
	Same	0		0		0		0			
	Regress	2		6		4		12			
Both: Standing Brd.Ju.	Improve	12	70.6	13	81.3	8	47.0	33	66.	9.5	
	Same	1		1		2		4			
	Regress	4		2		7		13			
Latchaw: Bask-ball Wall Pass	Improve	17	100.0	11	68.8	16	94.1	44	88.	1	
	Same	0		2		0		2			
	Regress	0		3		1		4			
Volleyball Wall Volley	Improve	15	93.8	7	43.8	7	41.2	29	58.	12	
	Same	1		6		5		12			
	Regress	1		3		5		9			
Soccer Wall Volley	Improve	12	70.6	11	68.8	15	93.8	38	76.	3	
	Same	2		3		1		6			
	Regress	3		2		1		6			
Softball Repeated Throws	Improve	12	70.6	6	37.5	12	70.6	30	60.	11	
	Same	1		6		2		9			
	Regress	4		4		3		11			
Shuttle-Run	Improve	13	76.5	10	62.5	13	76.5	36	72.	5.5	
	Same	1		2		1		4			
	Regress	3		4		3		10			
Vertical Jump	Improve	11	64.7	6	37.5	7	41.2	24	48.	13	
	Same	3		4		6		13			
	Regress	3		6		4		13			
Cowell Index: Social Adj.	Improve	11	64.7	12	75.0	11	64.7	34	68.	7.5	
	Same	1		1		1		3			
	Regress	5		3		5		13			

(Raw) indicates actual number of raw scores which did improve, remain the same and regress for each of the three types of physical education programs.

% indicates the actual percentage of improvement.

"Total" indicates all of the boys involved in the study at the Fernald School.

TABLE A-2
PERCENTAGE IMPROVEMENT TABLE
WRENTHAM SCHOOL

Test Item;	Status:	(Raw) SO	%	(Raw) PO	%	(Raw) FP	%	Total:	%	Rank%
AAHPER: Sit-ups	Improve	8	80.	4	40.	6	67.	18	62.	8.5
	Same	1		3		2		6		
	Regress	1		3		1		5		
Pull-ups	Improve	2	20.	1	10.	1	11.	4	13.8	13
	Same	8		6		7		21		
	Regress	0		3		1		4		
Shuttle Run	Improve	6	60.	9	90.	7	78.	22	76.0	2.5
	Same	0		1		0		1		
	Regress	4		0		2		6		
25 Ya. Dash	Improve	9	90.	5	50.	6	67.	20	69.0	4.5
	Same	1		0		1		2		
	Regress	0		5		2		7		
Softball Throw	Improve	6	60.	7	70.	6	67.	19	65.5	6
	Same	1		1		1		2		
	Regress	3		2		2		8		
600 Yd. Run-Wa.	Improve	This item was deleted from the final statistical findings because several boys had to be "motivated" in a helpful sense to finish. Some did not (both pre and post)								
	Same									
	Regress									
Both: Standing Brd.Ju.	Improve	8	80.	7	70.	6	67.	21	72	7
	Same	0		1		2		3		
	Regress	2		2		1		5		
Latchaw: Basketball Wall Pass	Improve	7	70.	8	80.	7	78.	22	76.0	2.5
	Same	2		1		1		4		
	Regress	1		1		1		3		
Volleyball Wall Volley	Improve	5	50.	3	30.	5	50.	13	44.8	11.5
	Same	4		6		3		13		
	Regress	1		1		1		3		
Soccer Wall Volley	Improve	4	40.	8	80.	6	67.	18	62.0	8.5
	Same	3		0		3		6		
	Regress	3		2		0		5		
Softball Repeated Throws	Improve	7	70.	4	40.	2	22.	13	44.8	11.5
	Same	3		5		6		14		
	Regress	0		1		1		2		
Shuttle-Run	Improve	9	90.	9	90.	5	50.	23	79.3	1
	Same	0		1		0		1		
	Regress	1		0		4		5		
Vertical Jump	Improve	9	90.	7	70.	5	56.	21	72.4	4.5
	Same	1		1		3		5		
	Regress	0		2		1		3		
Cowell Index: Social Adj.	Improve	5	50	7	70.	5	56.	17	58.6	10
	Same	1		0		0		1		
	Regress	4		3		4		11		

(Raw) indicates actual number of raw scores which did improve, remain the same and regress for each of the three types of physical education programs.

% indicates the actual percentage of improvement.

"Total" indicates all of the boys involved in the study at the Wrentham School

D. Statistical Analysis Concerning Separate Groups:

The following tables indicate specific findings relative to the significant improvement of each group. These results are based on utilization of the analysis of variance technique, the outcomes of which are stated via the F-ratio and applied to the Table of F to determine whether or not there was significance at the 5% level of confidence.

TABLE A-3
SIGNIFICANT IMPROVEMENT OF GROUPS
FERNALD SCHOOL

X indicates that there was significant improvement at the 5% level of confidence concerning the difference within groups following completion of the post-tests.

Test Item:	SO	PO	FP
AAHPER: Sit-ups	X	X	
Pull-ups	X		
Shuttle-Run	X	X	
25 Yard Dash			X
Softball Throw	X		X
600 Yard Run-Walk			X
Both: Standing Broad Jump		X	
Latchaw: Basketball Wall Pass	X		X
Volleyball Wall Volley	X		
Soccer Wall Volley	X	X	X
Softball Repeated Th.	X		X
Shuttle-Run	X	X	X
Vertical Jump			
Cowell Index: Social Adjustment	X	X	X

These statistical findings concerning significant improvement following administration of pre-tests, participation in the instructional program and administration of post-tests would indicate the following:

1. The Skill-Oriented Group indicated significant improvement over their pre-test performances, at the 5% level of confidence in ten of fourteen items while the Play-Oriented Group and the Free Play Group had significant improvement in six of fourteen and eight of fourteen items respectively.
2. The Skill-Oriented Group was the only group to show significant improvement over their pre-test performances, at the 5% level of confidence in the pull-up and volleyball wall volley.

3. The Play-Oriented Group was the only group to show significant improvement over their pre-test performances , at the 5% level of confidence, in the Standing Broad Jump.
4. The Free-Play Group was the only group to show significant improvement over their pre-test performances, at the 5% level of confidence, in the 25 Yard Dash and the 600 Yard Run-Walk.
5. The Skill-Oriented Group clearly showed more uniform significant improvement over their pre-test performances, at the 5% level of confidence, in Motor Performance Items.
6. Each Group showed significant improvement over their pre-test performances, at the 5% level of confidence, in the Soccer Wall Volley and the Latchaw Shuttle Run (not requiring hand involvement).
7. Each Group showed significant improvement over their pre-test scores, at the 5% level of confidence, in the Cowell Social Asjustment Index.
8. The Play-Oriented Group showed less significant improvement over their pre-test performances, at the 5% level of confidence, than either of the other two groups.

TABLE A-4
SIGNIFICANT IMPROVEMENT OF GROUPS
WRENTHAM SCHOOL

X indicates that there was significant improvement at the 5% level of confidence concerning the difference within groups following completion of the post-tests.

Test Items:	SO	PO	FP
AAHPER: Sit-ups	X		
Pull-ups			
Shuttle-Run		X	X
25 Yard Dash	X		
Softball Throw	X	X	
**600 Yard Run-Walk			
Both: Standing Broad Jump		X	
Latchaw: Basketball Wall Pass	X	X	X
Volleyball Wall Volley			
Soccer Wall Volley			X
Softball Repeated Th.	X		
Shuttle-Run	X		
Vertical Jump	X		
Cowell Index: Social Adjustment			

**This item was deleted from the final Presentation of the Data.

The foregoing table concerning significant improvement following administration of pre-tests, participation in the instructional program and administration of the post-tests would indicate the following:

1. The Skill-Oriented Group showed significant improvement, at the 5% level of confidence, over their pre-test performances in seven of fourteen items while the Play-Oriented Group and the Free Play Group showed significant improvement in four of fourteen and three of fourteen items respectively.
2. The SKill-Oriented Group was the only one to show significant improvement over their pre-test scores, at the 5% level of confidence, concerning the:
    a. Sit-ups
    b. 25 Yard Dash
    c. Repeated Softball Throws
    d. Latchaw Shuttle Run (no hand involvement)
    e. Vertical Jump
3. The Play-Oriented Group was the only one to show significant improvement in the Standing Broad Jump.
4. The Free Play Group was the only one to show significant improvement over their pre-test performances, at the 5% level of confidence, in the Soccer Wall Volley.
5. The Skill-Oriented Group indicated a more uniform improvement over their pre-test performances, at the 5% level of confidence, in items related to Motor Performance.
6. None of the groups indicated any significant improvement over their pre-test performances, at the 5% level of confidence, in the Pull-up and the Volleyball Wall Volley.
7. None of the groups indicated any significant improvement over their pre-test scores, at the 5% level of confidence, in Social Adjustment.

D. Statistical Findings Concerning Significant Performance Difference Between Groups:

In ascertaining these findings the co-variant technique[1] was utilized which like its counterpart, the analysis of variance, culminates with the F-ration. Again the 5% level of confidence was utilized.

Where significance was found between groups the Duncan Test for Multiple Comparisons[2] was utilized to determine which group was, in fact, significantly different. The results of the co-variant technique and utilization of Duncans Test appear on the following page.

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[1] McNemar, Quinn. Psychological Statistics. New York: John Wiley and Sons, Inc. 1963. pp. 362-73.

[2] Duncan, David B. "Multiple Range and Multiple F Tests," Biometrics, 11:1-41, 1955.

TABLE A-5
SIGNIFICANT PERFORMANCE DIFFERENCE BETWEEN GROUPS WRENTHAM AND FERNALD SCHOOLS

X indicates that this group's performance did differ significantly, at the 5% level of confidence, from the group or groups not marked by a X.

	Fernald School			Wrentham School			
Test Items:	SO	PO	FP	SO	PO	FP	
AAHPER: Sit-ups							
Pull-ups	X						
Shuttle-Run							
25 Yard Dash							
Softball Throw							
**600 Yard Run Walk							
Both: Standing Broad Jump							
Latchaw: Basketball Wall Pass	X		X				
Volleyball Wall Volley	X						
Soccer Wall Volley							
Softball Repeated Thr.							
Shuttle-Run							
Vertical Jump							
Cowell Index: Social Adjustment							

The above Table indicates the following:

1. It is indicated at the Fernald School that the Skill-Oriented Physical Education Program afforded better opportunity for the boys to develop upper arm strength as indicated by significant improvement in the Pull-Up at the 5% level of confidence. This becomes increasingly interesting when at both schools there was less improvement in the Pull-Up than in any other item!
2. It is indicated at the Fernald School that the Skill-Oriented and Free-Play Physical Education Programs afforded a significantly greater opportunity for their boys to become more proficient in the Basketball Wall Pass and elements of physical fitness and motor ability included therein.
3. It is indicated at the Fernald School that the Skill-Oriented Physical Education Program afforded a significantly greater opportunity for the boys to become proficient in the Volleyball Wall Volley technique, a hand-eye coordination movement.
4. It is indicated at the Wrentham School that none of three types of physical education programs afforded a significantly greater opportunity for the boys to become more proficient in any of the test items.

CHAPTER VIII

CONCLUSIONS AND RECOMMENDATIONS

A. Introduction:

It should be stated at the outset that conclusions and recommendations are based primarily on two sources of information. These sources are:

1. Information taken from the Presentation of the Data.
2. First hand observational notes which are recorded, for the most part, in "Comments After Conducting The Class Program," a culminating section included in each class plan presented in Chapters IV, V and VI.

It should be noted that although the "Comments" offered in preceeding chapters were generalized to cover both schools involved in the study that they, the schools, were somewhat different. The majority of the boys (50) and the larger groups were at the Fernald School. The degree of "educability" was also sightly higher here. Therefore, while the population (29) at the Wrentham School is not being shuned the primary emphasis does, of necessity, apply to the experimental programs carried on at the Fernald School. Two additional boys at this school who had been quite active during the instructional class program had to be deleted from the final analysis because of excessive absenteeism which could not exceed nine class hours assuming that at least one-third of those were properly made-up. At Wrentham three boys were dropped for various reasons and another (member of FP Program) who had attended regularly, only to become ill during the third division, had to be excluded from the final statistical analysis.

B. Conclusions Based Primarily on the Presentation of the Data:

1. The performance of the Skill-Oriented Groups at both schools indicated significant improvement in a greater number of test items than either of the other groups at the respective schools.
2. At both schools the Skill Oriented Groups, based on the number of significantly improved performances, clearly indicated a more uniform improvement in terms of motor ability.
3. The Skill-Oriented Group at the Fernald School indicated the greatest improvement in the three items which collectively represented the least "across the board" improvement by the three types of physical education programs at that school (pull-ups, vertical jump and volleyball wall volley). The foregoing achievements by the Skill-Oriented Group seem even more striking when it was ascertained that the greatest "across the board" improvement by the three groups at that school occured in the basketball wall pass, the situps, the soccer wall volley, the 600 yard run-walk and the shuttle runs (2) .
4. The Play-Oriented Groups, at both schools, indicated a stronger showing in the standing broad jump an item which combines the element of leg power with coordinated body movement.
5. Although each of the groups at the Fernald School gained significantly over their pre-test scores in the Cowell Social Adjustment Index, none gained enough to be significantly different. However, when both improvement and regression were considered, on a percentage basis, the Play-Oriented Group was slightly superior.

6. At the Wrentham School, regarding social adjustment, the degree of regression was quite noticeable and as a result there was no significant improvement. However, it was the Play-Oriented Group which indicated the most"improvement," according to the percentage tables and the least amount of"regression"

7. The data of this study would indicate that the Play-Oriented Physical Education Program offered better opportunity for a greater degree of social adjustment, within a physical education class setting, at both schools.

8. At the Fernald School the significant improvement in both variations of the shuttle run by the Skill-Oriented and Play-Oriented Groups indicated that both types of physical education programs did contribute to increased agility among educable mentally retarded boys. This seemingly becomes more evident when both groups indicated a high percentage of improvement in the AAHPER Shuttle Run which involved picking up and setting down a block of wood while moving.

9. The Free Play Group at the Fernald School regressed markedly in the AAHPER Shuttle Run. This compared to their far better showing in the less involved Latchaw Shuttle Run may be indicative of what can occur due to the lack of directed detail to skill. This may also explain their regression in the pull-ups and the standing broad jump. On the other hand, their excellent performance in the basketball wall pass would indicate that the considerable exposure to basketball which they received in a free-play setting did aid in producing a positive reaction.

10. The Free-Play Group at the Wrentham School, who thrived on softball and individual ball-type activities throughout indicated their only significant improvement in the AAHPER Shuttle Run, and the Latchaw Basketball Wall Pass and Soccer Wall Volley. Indications concerning the latter two would suggest a close relationship between what they did with much of their available class time and subsequent performances in those two test items.

11. At both the Fernald School and the Wrentham School there was little evidence to suggest that the Play-Oriented Physical Education Program was superior to the Free Play Activity Physical Education Program.

C. Conclusions Based Primarily on Observation:

1. Introduction: There is a danger here that one could overstate numerous findings determined via this study most of which have already been clearly stated in the "Comments" found in the conclusion of each individual class plan in Chapter IV, V and VI. The reader is directed to these plans in that the conclusions and recommendations there are far more specific. Those conclusions and recommendations which follow will not duplicate points previously made especially regarding the advisability and/or recommendations relative to skills, culminating activities, play-type activities and activities conducive to free-play selection.

2. The Research Assistants in this study each had to assume a specific role which was appropriate to his respective type of program. In this regard these men were selected to teach a type of program based on their experiencial background and on their progessed major interests along with their personality types. It is believed that each Research Assistant did "fit" his type of program and there was little observational evidence which would suggest that any of the three, due to circumstances, caused the study to be a "biased one".

3. Conclusions:
   a. Skill-Oriented Physical Education Program::
      1) This study indicated that the Skill-Oriented Physical Education Program was superior in terms of the students gaining a greater degree of motor ability and isolated elements of physical fitness.

      2) The educable mentally retarded boys in this study were, for the most part, "followers" and in this regard a boy would generally perform a skill which was easier or one which had been previously learned in preference to one which was considered "new" or "difficult" The Skill-Oriented Physical Education Program tended to counteract this trait as the boy was continually exposed to practice or drill-type activity.

      3) The results of thes study indicated that limited skills relative to fundamental movement, soccer, volleyball, stunts, tumbling and simple apparatus work would be more readily learned through the Skill-Oriented Physical Education Program.

      4) Problems of discipline did occur most often in the Skill-Oriented Physical Education Program. Based on observation the following reasons for same are suggested:
         a) These boys were not allowed to deviate a great deal from the practice of skills.
         b) Regimentation in class organization was, for the most part, constantly maintained.
         c) There was not adequate time allowed during the culminating activity for these boys to "unwind" and in numerous instances theyfailed to realize fully that "fun.and/or competition were the intentions during this activity.

   b. Play-Oriented Physical Education Program:
      1) This study indicated that the fundamentals of basic movement, soccer and elementary tumbling were more readily achieved through play-type activities than were fundamentals of volleyball, more advanced tumbling and simple apparatus work.

      2) This study indicated that realization of "early success" is so important with the educable mentally retarded boy. The Play-Oriented Physical Education Program seemingly afforded the best opportunity for such to occur.

      3) Social Adjustment was a primary factor and this study indicated that boys do improve in this regard while in a physical education class setting. There was no significant evidence that any of the three types of programs would be more effective in promoting same. From an observational viewpoint,however, the Play-Oriented Program was the most effective.

      4) Educable mentally retarded boys who are willing should be given opportunities to lead during "warm-up activities" and should be afforded opportunities within their program to lead others. Such opportunity was available through the Play-Oriented Program.

      5) Frustration did result in numerous cases when the boys in the Play-Oriented Physical Education Program participated in selected play-type activities which simply demanded too much skill on the part of the participant.

c. Free Play Activity Physical Education Program

1) Methods of Activity Selection: At the Fernald School the "majority rule" type of selection was utilized almost entirely and was considered quite successful . Only in a very few instances did the boys wish to act as individuals in terms of activity.

At the Wrentham School the "majority rule" type of selection was relatively unsuccessful. These ten boys, for the most part, would not remain together as a group for any length of time and preferred to act as individuals even when a "majority rule" activity was in session.

Therefore, both types of selection were utilized a great deal during the course of this study but basically on two different fronts. Both have their merits as the former stresses individual interaction with a group while the latter stresses individual interaction, per se. Insofar as the instructor is concerned, there was more direction involved with the"majority rule" than with the "individual student" type of selection. In the latter he served primarily as a mediator.

2) Activities Selected: There was little question, at the outset at least, that the educable mentally retarded boy leaned toward selection of activities to which he had previously been exposed. In citing specific examples the Fernald Group favored basketball, apparatus work (buck, horse and parallel bars) and combinations of punchball and kickball baseball during the initial one-third of the program. During the middle portion the "old standby" of basketball remained supreme until "relay bowling" was selected during the twenty-first class hour. From this time on bowling became the most popularly selected activity.

At Wrentham baseball was very popular at the outset and remained as such, becoming the most often chosen activity during the final portion of the program. Rope swinging was the second most requested activity but both bowed to "individual ball skills" which were the most dominant during the middle portion of the program.

At the Fernald School "bowling" is the best example of how these boys would tend to select the same activities in a consecutive manner.

The "carry-over" from the Skill-Oriented and Play-Oriented Physical Education Programs to the Free-Play Program was almost nil. That is to say that despite interaction of these boys in their school experiences and in their dormitories or cottages there were only a few instances where selection of activities reflected those being participated in by the other groups.

3) The lowest absentee rate was noted concerning the boys in the Free Play Program at the Fernald School.

4) The Free-Play Physical Education Programs at both schools were conducive to close student-teacher relationship.

5) Performances of the Free Play Group at the Fernald School indicated that the nature of the activities selected and the relative enthusiasm expressed toward same did aid these boys in gaining significantly better achievement levels in selected items of motor ability and physical fitness.

d. Conclusions Resulting from Completion of Experimental Study Not Specifically Related To One Particular Type of Program:

1) This study indicated that educable mentally retarded boys could learn basic movement skills and apply them to appropriate play-type situations.

2) The results of this study indicated that educable mentally retarded boys do thrive on competition and like the normal boy competition did provide added motivation.

3) The results of this study indicated that grouping according to age would be advantageous with the educable mentally retarded boy.

4) This study indicated that educable mentally retarded boys must "understand" what they are doing. If they do not it is quite possible that they will become frightened and balk at meaningful participation.

5) This study indicated that selected team sports could be utilized as a mode of teaching educable mentally retarded boys. Soccer served as an excellent example in both the Skill-Oriented and Play-Oriented Programs. Volleyball, on the other hand, served as an example whereby the boys were expected to do too much too soon.

6) This study indicated that structured "warm-up activities" can be administered to the educable mentally retarded boy. However, in doing so it was also indicated that less emphasis should be placed on perfection and/or counting with more on mimetics and opportunity for self expression.

7) It was an indication of this study that innovations such as sturdily constructed wooden boxes, oversized balls, deflated balls and roped-off lanes are as important in aiding the educable mentally retarded boy to learn as they are for usage with the non-retarded.

8) From an observational viewpoint in this study there was a noticeable correlation between higher educability and ability to perform skills or fundamentals in a more satisfactory manner.

9) It was not uncommon to see an educable mentally retarded boy perform a particular skill, fundamental or technique in an incorrect progression. The suggested reasons for this, based on observation in this study, were "not looking,""not listening" and the inability of the boy to comprehend what was said.

10) Control from a disciplinary standpoint was, at times, difficult to maintain in the institutional setting. In this regard two further conclusions are stated below:
    a) The majority of the disciplinary problems, in this study, occured with boys of "higher educability".
    b) At both schools but at the Fernald School in particular there was a great deal of "patience testing" concerning the individual student and his relationship to his instructor. Conditions indicated that because these boys were in the normal course of events administered to by so many different individuals that this type of behavior was considered normal.

11) A verbal rebuke often successful with a non-retarded boy was not, for the most part, successful when invoked during this study.

D. Recommendations: (All recommendations below are based on the "major study".)

1) It is a major recommendation of this study that the Skill-Oriented Physical Education Program be utilized with educable mentally retarded boys with the following suggested alterations.
   a) That formal class organization concerning roll call, stepping out, and warm-up activity should be lessened to fall more in line with the semi-formal attitude utilized by the Play-Oriented Program.
   b) That detail to skill through direct teaching and practicing via skill drills should be continued.
   c) That time afforded for the culminating activity be increased.
   d) That every fourth class hour should provide a "change-up" in the form of a Play-Oriented or Free-Play type activity period with emphasis on freedom of play and individual expression.

2) A Free-Play Activity Physical Education Program is not recommended if the learning of detailed skills are desired.

3) On the basis of this study the Play-Oriented Physical Education Program could not be regarded as superior to the Free Play Activity Physical Education Program. Both of them have characteristics which could help to enhance the Skill-Oriented Physical Edcuation Program.

4) Although it is not recommended that "form" in a skill or an activity concerning the educable mentally retarded boy be "all important" certainly it must be taught. These boys are capable of learning!

5) Evaluations such as the two obstacle courses utilized in this study are recommended. As it has already been mentioned elsewhere these boys thrive on competition and are interested in how well they are progressing.

6) Multiple movement activities, although frustrating to some of the boys classed as being lower in "educability", certainly can be learned by the typical educable mentally retarded boy and should be included in program content.
7) On the basis of this study it was determined that while formal class organizational procedures are possible it must be remembered that educable mentally retarded boys do forget easily.

8) Because of potential disciplinary problems it is recommended that much care be taken in ascertaining how many groups should be utilized within a specific class setting.

9) It is recommended that circle or semi-circle formations be used in preference to stright line formations when an explanation-demonstration session is planned.

10) The "draw box" technique utilized in this study is definitely recommended for ascertaining division of a group. However it should not be the sole determinant.

11) In this study praise generally produced meaningful reaction and better motivation when utilized in each of the three types of physical education programs and it is recommended as a "must" when working with the educable mentally retarded boy.
12) Indications from this study were that "interaction" among boys participating in different types of programs, regarding activities taught or selected, cannot be assumed.

APPENDIX

Part I: Social Adjustment Raw Scores
Part II: Physical Fitness and Motor Achievement Raw Scores (9 pages)
Part III: Guide Sheets For AAHPER and Latchaw Tests (2 pages)

Social Adjustment Raw Scores**

Fernald School:	No.	SO Program			PO Program			FP Program		
		Pre:	Post:	Dif:	Pre:	Post:	Dif:	Pre:	Post:	Dif:
	1.	-32	-25	+7	-18	2	+20	4	15	+11
	2.	-11	-21	-10	10	10	0	-39	-17	+22
	3.	-21	14	+35	-27	- 3	+24	15	13	- 2
	4.	8	20	+12	4	7	+ 3	-28	-33	- 5
	5.	9	32	+23	-19	7	+26	-25	-22	+ 3
	6.	-14	-19	- 5	10	32	+22	15	26	+11
	7.	Excessive Absence			19	40	+21	10	21	+11
	8.	11	7	- 4	-12	11	+23	-25	-12	+13
	9.	-17	-17	0	-12	-13	- 1	40	48	+ 8
	10.	36	44	+ 8	7	11	+ 4	21	17	- 4
	11.	10	13	+ 3	13	8	- 5	- 9	-12	- 3
	12.	13	10	-3	-20	0	+20	-17	-11	+ 6
	13.	- 4	7	+11	- 3	8	+11	5	- 1	- 6
	14.	-21	1	+22	- 2	-36	-34	- 2	12	+14
	15.	22	43	+21	10	12	+ 2	- 1	1	+ 2
	16.	-14	0	+14	-12	13	+25	24	26	+ 2
	17.	1	7	+ 6	Excessive Ab..			3	3	0
	18.	-11	-23	-12	--------------			----------------		

Wrentham School	No.	SO Program			PO Program			FP Program		
		Pre:	Post:	Dif:	Pre:	Post:	Dif:	Pre:	Post:	Dif:
	1.	- 9	- 9	0	-41	-22	+19	19	18	- 1
	2.	-10	- 6	+ 4	-26	-25	+ 1	-19	-30	-11
	3.	-10	-16	- 6	- 6	- 4	+ 2	Excessive Absence		
	4.	- 8	- 6	+ 2	23	16	- 7	-11	4	+15
	5.	19	30	+11	-50	-17	+33	10	3	- 7
	6.	- 3	- 6	- 3	-16	-18	- 2	-12	-17	- 5
	7.	- 9	-16	- 7	- 8	- 6	+ 2	19	27	+ 8
	8.	- 5	10	+15	21	20	- 1	-40	-36	+ 4
	9.	24	37	+13	13	15	+ 2	-15	-12	+ 3
	10.	-47	-29	+18	-18	- 9	+ 9	7	13	+ 6

**Utilizing two judges a maximum positive score for any boy could have been sixty and a maximum negative score could have been sixty. Inasmuch as two forms are completed for each boy (positive and negative) by each judge the positive scores must be added together and the negative scores must be added together. The Social Adjustment score is then derived by adding these two sums together.

Ex. John Doe: Positive = 3-1-1-0-2-2-2-1-2-2 = +17
Negative = 0-2-1-2-1-1-1-2-1-1 = -12
+ 5

A copy of the forms utilized are found on page 9, Chapter I.

FERNALD STATE SCHOOL

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Skill-Oriented Group

								AAHPER Youth Fitness Test				
No.	Initials	Age*	Ht.	Wt.	S.U. Pre	S.U. Post	P.U.	Sh.R.	SBJ	25Da.	SBT	**600 R-W
.	R.A.	14-9	62.5	123	16	8#	0-0	15.7-15.1	26-36	5.0-5.2#	66-82	201-281#
.	D.B.	15-6	68.25	146	20	22	1-2	13.6-11.2	50-52	4.4-4.5#	56-66	169-162
.	E.B.	13-11	62.5	115	40	64	0-0	13.9-12.6	46-55	5.2-5.0	85-121	177-168
.	D.Csy.	12-6	55.75	74	53	60	2-3	17.7-15.0	32-38	5.3-5.1	63-57#	206-194
.	D.Cst.	14-7	64.5	116	32	29#	4-5	10.8-10.5	53-48#	4.0-4.2#	126-121#	157-151
.	J.C.	14-10	62.5	95	60	60	0-1	11.1-11.7#	50-50	4.5-4.7#	73-74	164-158
.	A.E.***	10-5			8	25	0-0	18.7-15.8	15-20	8.4-7.4	30-25#	Medical
.	W.H.	11-2	57.25	94	35	25#	0-0	13.7-13.1	41-36#	5.4-5.2	64-55#	229-198
.	R.H.	14-7	58.	82	74	80	2-3	13.8-15.1	29-57	5.0-5.1#	68-74	161-158
.	H.M.	11-10	55.5	104	23	18#	0-0	13.6-12.9	50-57	5.0-4.8	99-121	220-199
.	Jh. M.	12-2	56.25	73	35	40	4-5	12.7-11.1	44-43#	5.5-5.1	66-66	165-148
.	Jo. M.	12-2	56.	79	26	33	2-3	13.0-13.2#	41-42	4.9-4.9	65-64#	184-169
.	D. N.	12-11	61.	102	23	33	1-1	14.- 13.4	36-41	4.4-4.6#	64-89	188-165
.	M. P.	12-11	65.	103	14	23	0-0	14.2 13.0	43-48	4.8-4.8	55-60	165-153
.	G. S.	14-9	65.25	122	38	45	0-0	11.8 11.9#	45-48	5.0-4.8	93-115	193-193
.	R.S.	15-4	64.75	113	33	75	3-3	12.7 11.0	44-72	4.5-4.5	87-88	166-144
.	Pa. O.	15-0	62.75	137	6	23	0-0	13.2 12.5	56-61	4.6-4.8#	58-52#	235-238#
.	C.K.	14-10	67.25	142	30	53	1-1	13.1 10.7	63-50#	4.4-4.3	85-100	165-158
Pre-Mean												
Post-Mean		13-8			32.82		1.18	13.15	44.06	4.82	74.83	185.00
Pre-SD					40.65		1.59	12.60	49.06	4.80	82.65	178.65
Post-SD												

No. of tests given was 125, No. of tests improved or remaining same was 99 (79.4%)
(indicates tests given both pre and post)
*Age stated in months and effective on June 1, 1966.
*Absent too frequently and scores do not count in stated means and SD.
#Indicates regression
*The 600 Yard-Run-Walk is stated in the total number of seconds.

FERNALD STATE SCHOOL

PLAY_ORIENTED GROUP

(AAHPER Youth Fitness Test)

Initials	Age*	Ht.	Wt.	S.U.	P.U.	Sh.R.	SBJ	25Da.	SBT	600 R-W**
J.B.	15-7	62.	98	50-50	0-0	12.3-11.9	53-63	4.6-4.6	38-60	201-215#
B.B.	11-1	53.5	69	8-30	1-1	11.7-11.2	51-51	4.8-4.9#	82-76#	160-166
R.B.	13-5	56.5	95	8-12	0-0	15.7-15.2	25-30	5.6-5.1	26-24#	244-226
D.D.	15-6			3-11	0-0	12.5-12.1	46-37#	5.2-5.1	86-102	227-237#
M.D.	13-6	61.	85	28-43	1-2	13.7-11.4	37-48	4.7-4.6	83-84	175-173
R.E.	15-2	64.25	118	31-45	3-1#	10.8-10.1	71-75	3.8-3.8	109-110	170-142
D.J.	15-1	64.5	116	28-46	1-0#	12.6-12.0	34-51	4.5-4.8#	130-137	145-169#
R.M.	15-6	69.	119	76-80	3-3	11.7-11.0	63-64	4.1-4.2#	80-86	142-139
P.M.	10-9	53.25	70	8-10	0-0	16.2-16.5#	26-28	6.8-5.9	27-30	228-227
J.N.	10-7	53.75	65	38-20#	4-1#	13.9-12.8	40-54	5.0-5.0	44-56	188-205#
Pt.O.	11	56.5	113	17-28	0-0	14.6-14.7#	36-41	5.1-5.1	46-37#	238-243#
P.O.	14-8	64.5	124	6-11	0-0	20.4-13.1	39-55	8.3-5.1	38-33#	238-174
C.P.	11-10	50.5	64	7-10	0-0	16.2-15.9	22-24	5.7-6.2#	35-41	228-213
T.R.	11-2	56.	78	11-12	0-0	14.9-13.0	32-23#	5.2-5.7#	51-58	208-200
A.W.	14-9			7-40	0-0	13.5-12.8	43-47	5.1-4.9	88-85#	259-230
L.W.	11-9			23-73	0-0	14.1-12.8	44-53	4.9-4.3	110-105#	192-155
D.W.***	10-9			12	0-0	15.9-15.5	34-25#	5.2	35-33#	
Pre-Mean				21.80	.81	14.05	41.38	5.21	67.06	202.69 ~~212.00~~
Post-Mean	13-2			32.56	.50	12.28	46.50	4.96	70.25	~~195.50~~ 194.81
Pre-SD										
Post-SD										

No. of tests administered (pre and post) was 116, No. of tests improved or remaining the same was 89 (76.7%)

*Age stated in months and effective on June 1, 1966.

*** Absent too frequently and scores do not count in stated means and SD.

#Indicates regression

**The 600 Yard Run-Walk is stated in the total number of seconds.

FERNALD STATE SCHOOL

FREE PLAY GROUP (AAHPER Youth Fitness Test)

Initials	Age*	Ht.	Wt.	S.U.	P.U.	Sh.R.	SBJ	25Da.	SBT	600 R-W**
				Pr.-Po.						
J.A.	14-2	60.8	114	42-34#	3-1#	11.9-12.0#	47-51	4.3-4.1	60-69	147-158#
O.B.	12-9	57.5	133	6-14	0-0	21.1-16.9	28-28	7.9-6.7	24-26	288-260
W. B.	11-8	54.0	111	11-14	0-0	13.3-13.4#	32-35	5.4-5.0	77-83	237-219
A. B.	10-5	53.3	75	55-11#	0-0	16.9-13.0	38-30#	5.9-6.1#	34-37	192-195#
J. C.	12-10	58.8	97	34-46	3-0#	14.0-14.4#	42-54	5.0-4.5	55-67	223-214
D. L.	12-9	60.8	131	20-20	0-0	12.6-13.3#	42-38#	5.0-5.0	88-83#	226-238#
L. L.	12-3	59.5	91	57-101	4-2#	12.0-12.4#	53-51#	4.5-4.7#	70-111	215-220#
W. L.	15-0	59.	80	68-85	7-4#	12.0-13.4#	38-37#	4.3-4.2	60-56#	165-154
G. O.	14-3	58.5	97	50-82	2-5	11.7-11.6	38-54	4.9-4.8	84-99	167-159
T. P.	12-7	45.8	93	21-28	1-1	13.0-12.4	48-43#	5.0-5.0	78-85	221-215
G. P.	12-0	54.	67	18-27	2-3	13.9-14.0#	48-56	5.1-4.9	69-78	240-204
L. S.	12-3	52.3	73	22-18#	2-0#	15.8-16.3#	32-27#	5.8-5.5	19-14#	308-307
W. S.	12-9	59.3	91	35-30#	4-1#	13.7-12.9	40-42	5.3-4.9	63-69	188-169
W. Sh.	14-0	45.8	86	44-54	0-0	13.8-11.6	47-60	4.8-4.2	101-104	179-178
R. S.	13-9	64.	130	30-78	0-0	13.9-13.8	41-39#	5.0-4.2	66-68	196-170
J. S.	14-10	64.8	126	40-47	6-4#	10.7-11.1#	60-62	4.8-4.0	145-140#	202-135!
J. T.	13-3	62.8	112	62-42#	0-0	13.0-11.6	58-53	4.6-4.5	75-77	187-157
Pre-Mean				36.18	2.00	13.72	43.06	5:15	68.70	210.65
Post-Mean	13-0			43.00	1.24	13.18	45.00	4;84	74.47	197.18
Pre-SD										
Post-SD										

No of tests administered (pre and post) was 119, No. of tests improving or remaining the same was 81 (68%)

*Age stated in months and effective on June 1, 1966.

*The 600 Yard-Run-Walk is stated in the total number of seconds.

#Indicates regression

FERNALD STATE SCHOOL

SKILL_ORIENTED GROUP

Latchaw Motor Achievement Test

No.	Initials	BBWV. Pr.-Po.	VBWV.	SWV.	ST	SBJ	SR	VJ
1.	R.A.	8-11	2-2	5-5	7-3#	26-36	19.9-15.0	9-9
2.	D.B.	16-20	3-6	11-12	5-7	50-52	17.5-14.0	20-14#
3.	E.B.	14-17	4-9	8-11	6-7	46-55	15.3-14.7	9-9
4.	D.C.	8-9	1-5	7-7	4-4	32-38	16.8-15.8	9-10
5.	D.Cast.	16-24	8-20	10-13	10-10	53-48#	13.8-12.0	14-17
6.	J.C.	13-17	3-8	9-14	1-8	50-50	14.1-14.0	8-9
7.	A.E.***	1-4	0-0	4-5	1-0#	15-20	24.2-22.4	4-6
8.	W.H1	8-10	2-3	6-5#	3-2#	41-36#	17.1-17.3#	7-9
9.	R.H.	8-11	0-3	3-4	1-4	29-57	30.3-17.2	9-11
.	H.M.	12-18	5-14	15-13#	9-11	50-57	14.4-14.4	10-10
.	J.M.	10-13	5-9	10-14	6-9	44-43#	14.8-13.5	9-11
.	Jos. M.	12-14	2-6	8-11	5-7	41-42	14.7-15.2#	12-10#
.	D.N.	9-13	4-8	5-9	6-7	36-41	13.3-14.2#	10-11
.	M.P.	8-12	4-1#	3-5#	1-2	43-48	17.3-15.4	8-10
.	G.S.	12-17	2-5	5-7	8-8	45-48	13.4-13.3	7-9
.	R.S.	15-19	7-21	11-15	4-8	44-72	17.1-13.3	11-16
.	Pa. O.	8-9	2-4	8-9	3-2#	56-61	16.6-15.9	10-9 #
.	C.K.	17-20	4-8	4-10	7-9	63-50#	17.1-15.6	12-14
Pre-Mean		11.35	3.41	7.82	5.06	44.06	16.68	10.24
Post-Mean		~~15.0~~	7.77	9.65	6.35	49.06	14.75	11.06
Pre-SD		14.94						
Post-SD								

No.of tests administered (pre and post) was 126, No of tests improving or remaining the same was 108 (85.7%).

***Absent too frequently and scores do not count in stated means and standard deviations.

#Indicates regression

FERNALD STATE SCHOOL

PLAY-ORIENTED GROUP

Latchaw Motor Achievement Test

No.	Initials.	BBWV.	VBWV.	SWV.	ST.	SBJ.	SR.	VJ.
1.	J.B.	7-14	2-1#	9-12	6-5#	53-63	14.2-13.8	9-9
2.	B.B.	11-16	6-8	10-14	6-9	51-51	14.4-14.5#	9-10
3.	R.B.	6-8	0-0	5-8	2-1#	25-30	16.2-15.2	6-6
4.	D.D.	15-15	6-14	9-9	4-8	46-37#	13.7-13.3	8-10
5.	M.D.	13-15	2-5	7-8	4-7	37-48	14.9-14.7	15-15
6.	T. E.	19-21	13-11#	16-15#	10-11	71-75	12.3-11.8	16-13#
7.	D. J.	18-12#	6-9	9-14	11-9#	34-51	13.1-13.0	9-12
8.	R.M.	12-13	6-5#	8-11	7-7	63-64	13.3-13.3	18-17#
9.	P.M.	5-6	0-0	5-7	1-3	26-28	20.2-16.2	7-12
0.	J.N.	11-10#	2-9	8-11	5-5	40-54	16.7-16.7	11-9#
1.	Pt. O.	7-7	1-1	9-9	3-1#	36-41	20.7-17.9	11-8#
2.	P.O.	9-11	2-3	5-8	6-6	39-55	21.4-15.3	9-10
3.	C.P.	4-5	0-0	4-4	1-1	22-24	18.6-18.8#	8-6#
4.	T.R.	12-10#	1-1	8-6#	6-6	32-23#	16.3-16.9#	9-8#
5.	A.W.	14-16	3-3	7-14	7-11	43-47	14.9-15.0 #	12-12
6.	L.W.	15-21	4-6	9-13	8-8	44-53	14.7-13.4	10-11
7.***	D.W.	-8	-3	-6	0-2	34-25#	-18.0	8-7#
	Pre-Mean	11.13	3.38	8.00	5:44	41.38	15.99	10.44
	Post-Mean	12.50	4.75	10.20	6.13	46.50	14.99	10.50
	Pre-SD							
	Post-SD							

No. of tests given was 115, No. of tests improved or remaining same was 97 (84.3%)
(indicates tests given both pre and post)

***Absent too frequently and scores do not count in stated means and SD.

#Indicates regression

FERNALD STATE SCHOOL

FREE PLAY GROUP

No.	Initials.	BBWV.	VBWV.	SWV	ST.	Latchaw Motor Achievement Test:		
		Pr.-Po.				SBJ.	Sh.R.	VJ.
1.	J.A.	9-13	2-0#	10-9#	4-5	47-51	13.0-13.0	15-12#
2.	O.B.	3-4	0-0	3-4	1-2	28-28	20.4-19.9	5-6
3.	W.B.	10-16	5-7	7-9	8-6#	32-35	16.0-15.0	7-7
4.	A.B.	4-3#	0-0	3-4	0-1	38-30#	22.1-19.1	3-6
5.	J.C.	11-13	0-3	5-9	4-2#	42-54	23.8-15.8	10-9#
6.	D.L.	15-18	3-9	10-12	9-9	42-38#	17.7-15.1	10-10
7.	L.L.	14-16	5-9	11-19	9-10	53-51#	15.4-13.4	11-11
8.	W.L.	9-10	2-1#	3-7	3-3	38-37#	14.5-15.0#	11-12
9.	G.O.	15-18	8-6#	11-13	5-9	38-54	14.7-13.4	13-11#
10.	T.P.	13-14	4-3#	4-9	5-6	48-43#	14.9-14.0	9-10
11.	G.P.	6-11	2-2	2-9	3-4	48-56	25.2-14.9	9-8#
12.	L.S.	5-9	0-0	4-9	5-4#	32-27#	29.3-18.6	9-10
13.	W.S.	11-12	1-2	6-6	6-8	40-42	20.5-16.4	10-10
14.	W.Sher.	14-17	4-6	8-12	7-8	47-60	15.8-14.4	11-12
15.	R.S.	11-14	0-1	5-7	3-6	41-39#	17.7-13.0	10-10
16.	J.S.	13-21	8-6#	8-10	8-10	60-62	13.0-13.2#	16-16
17.	J.T.	7-14	2-2	3-8	5-8	58-58	14.4-14.7#	11-12
	Pre-Mean	10.00	2.71	6.06	5.00	43.06	18.14	10.00
	Post-Mean	13.12	3.35	9.18	5.94	45.00	15.23	10.12
	Pre-SD.							
	Post-SD.							

No. of tests given was 119, No. of tests improved or remaining same was 95 (80%)

#Indicates regression.

WRENTHAM STATE SCHOOL

Skill-Oriented Group

AAHPER Youth Fitness Test

No.	Int.	Age*	Ht.	Wt.	S.U.	PU.	Sh.R.	SBJ	25Da.	SBT	600R-W**
1.	M.B.	10-10	54.5	73	7-13	0-0	24.4-15.9	28-29	6.2-5.0	41-57	342-257
2.	J.C.	14-0	61.0	127	20-26	1-1	14.4-15.0#	18-26	6.1-6.0	47-59	355-319
3.	P.D.	13-0	58.0	126	12-20	0-0	17.5-15.5	33-37	7.6-6.0	51-60	335-253
4.	B.H.	10-11	48.3	71	0-1	0-0	23.0-23.9#	15-20	10.2-8.0	26-26	N.F-440
5.	F.H.	14-5	61.0	96	110-120	1-2	13.9-12.4	54-57	5.3-4.8	57-72	164-175#
6.	R.J.	14-1	58.0	129	1-1	0-0	25.3-24.7	17-22	6.7-6.2	34-31#	370-404#
7.	C.L.	11-10	53.0	81	2-11	0-0	19.6-20.9#	33-23#	8.1=6.1	27-35	361-330
8.	T.L.	12-3	56.0	90	20-20	0-0	16.0-15.2	19-32	6.3-6.0	23-31	215-240#
9.	A.M.	12-4	61.0	120	20-17#	0-1	11.5-13.0#	44-59	4.9-4.9	67-66#	205-198
10.	S.M.	10-9	54.5	72	0-1	0-0	25.5-24.8	23-19#	9.8-6.3	25-22#	N.F-480
PreMean					19.2	.20	19.11	28.4	7.12	39.8	
Post-Mean		12-6			23.0	.40	18.13	32.4	5.93	45.9	

No. of tests administered was 70, No. of tests improved or remaining same was 57 (This includes only pre and post tests)
(81.4%)

N.F. This indicates that the boy did not finish the test.

**The 600 Yard R-W. is stated in total seconds.

****

(Latchaw Motor Achievement Test)

No.	Int.	BBWV.	VBWV	SWV	ST.	SBJ.	Sh. R.	V.J.
1.	M.B.	5-13	0-4	4-9	4-4	28-29	19.1-17.0	7-8
2.	J.C.	7-9	0-2	6-5#	2-4	18-26	22.7-14.5	7-8
3.	P.D.	11-12	4-8	8-10	3-6	33-37	20.9-16.1	5-8
4.	B.H.	2-1#	0-0	0-1	1-1	15-20	31.0-37.1#	0-0 (no concept)
5.	F.H.	8-15	2-3	9-8#	6-7	54-57	14.1-13.8	12-14
6.	R.J.	2-6	1-0#	3-3	0-3	17-22	23.9-22.3	2-6
7.	C.L.	4-4	0-0	4-6	1-2	33-23#	25.7-21.0	5-7
8.	T.L.	4-7	0-0	4-4	2-4	19-32	21.8-16.1	7-8
9.	A.M.	16-16	7-22	14-12#	10-11	44-59	14.3-13.1	9-10
10.	S.M.	1-2	0-0	1-1	0-0	23-19#	28.2-18.2	2-3
Pre-Mean		6.0	1.4	5.3	2.9	28.4	22.17	5.6
Post-Mean		8.5	3.9	5.9	4.2	32.4	18.92	~~6.4~~ 7.2

No. of tests administered was 70, No. of tests improved or remaining same was 62 (88.6%).

WRENTHAM STATE SCHOOL

PLAY_ORIENTED GROUP

(AAHPER Youth Fitness Test)

No.	Int.	Age*	Ht.	Wt.	S.U. Pr.Po.	P.U.	Sh.R.	SBJ.	25Da.	SBT	600R-W**
1.	J.B.	14-2	58.3	98	2-2	0-0	19.1-18.8	32-30#	7.1-7.0	40-58	N.F.-385
2.	P.B.	12-8			3-12	0-0	24.9-17.2	10-18	7.9-6.7	24-44	N.F.-285
3.	A.C.	13-0	59.0	98	28-24#	1-0#	16.7-15.9	24-21#	5.9-5.7	46-44#	219--285#
4.	T.E.	14-10	59.0	81	100-100	3-2#	13.6-12.5	44-52	5.3-5.7#	69-76	211--196
5.	R.F.	13-7	60.8	118	3-1#	0-0	30.9-21.0	11-21	11.4-5.7!	23-37	357--288
6.	J.H.	10-5			8-15	0-0	39.9-20.5	0-10	8.4-8.5#	29-28#	334-343#
7.	K.K.	11-0	46.3	53	1-1	0-0	26.3-21.9	12-12	8.0-8.3#	0-26	415-384
8.	A.L.	14-8	64.0	130	35-33#	1-2	12.4-11.9	53-65	5.0-4.0	79-84	204-175
9.	G.L.	14-6	54.3	69	22-29	3-0#	16.6-15.5	41-43	5.4-6.0#	48-48	245-227
0.	M.W.	10-2			7-10	0-0.	19.0-19.0	7-22	7.5-9.8#	32-34	350-362#
Pre-Mean					20.9	.80	21.94	23.4	7.19	39.0	
Post-Mean		12-11			22.7	.40	~~[illegible]~~ 17.61	29.4	6.74	47.9	

No. of tests administered was 70, No. of tests improved or remaining same was 52(74.3%).

(Latchaw Motor Achievement Test)

No.	Int.	BBWV.	VBWV.	SWV.	ST.	SBJ.	Sh. R.	V.J.
1.	J.B.	8-9	0-2	1-7	3-3	32-30#	26.1-24.9	8-10
2.	P.B.	6-8	0-0	6-7	3-3	10-18	20.0-20.0	8-9
3.	A.C.	4-3#	0-0	1-4	1-3	24-21#	19.3-18.6	7-3#
4.	T.E.	12-13	3-5	8-7	6-6	44-52	15.2-14.7	10-9#
5.	R.F.	5-7	2-0#	5-8	4-7	11-21	27.7-15.2	4-7
6.	J.H.	2-11	0=0	1-2	3-3	0-10	30.4-21.5	7-8
7.	K.K.	3-5	0-0	2-3	0-0	12-12	24.3-22.8	2-6
8.	A.L.	12-20	10-10	8-7#	9-10	53-65	14.8-13.0	16-16
9.	G.L.	6-6	1-2	5-6	1-3	41-43	18.3-17.5	7-8
0.	M.W.	3-5	0-0	6-4#	2-1#	7-22	25.3-24.7	4-5
Pre-Mean		6.1	1.6	4.3	3.2	23.4	22.14	7.3
Post-Mean		8.7	1.9	5.5	3.9	29.4	19.29	8.1

No. of tests administered was 70, No. of tests improved or remaining the same was 61 (87.1%)/

**The 600 Yard R-W. is stated in total seconds

#Indicates regression

N.F.This indicates that a boy did not finish the particular test.

WRENTHAM STATE SCHOOL
FREE PLAY GROUP

(AAHPER Youth Fitness Test)

No.	Int.	Age*	Ht.	Wt.	S.U. Pr.-Po.	P.U.	Sh. R.	SBJ.	25Da.	SBT.	600 R-W**
1.	K.C.	14-0	58.0	120	20-20	4-2#	13.2-12.0	63-65	5.6-4.7	66-80	197-184
2.	P.D.	14-8			3-10	0-2	24.1-16.0	25-29	6.9-4.7	41-73	N.F-347
3.	S.G.	11-10	50.5	71	18-8#	0-0	29.9-30.2#	22-35	7.0-8.1#	23-34	390-392#
4.	J.H.	14-7	61.3	123	19-10#	0-0	23.3-18.2	00-24	8.8-7.3	46-0#**	404-363
5.	R.J.	10-10	49.5	69	2-5	0-0	21.8-20.0	21-24	9.6-7.9	34-33#	240-402#
6.	R.L.	11-5	48.8	63	3-8	0-0	27.2-22.1	19-19	6.6-7.6#	42-39#	350-290
7.	M.M.	14-10	61.5	101	18-45	0-0	13.9-13.5	45-60	5.0-4.9	49-59	210-187
8.	R.N.	11-2	53.	67	18-43!	0-0	20.0-20.4#	33-26#	9.5-9.7#	10-4#	250-390#
9.	D.N.	12-3	55.5	113	1-1	0-0	24.1-22.6	2-14	11.0-8.0	23-25	298-424#
10.	N.S.	11-8	58.5	91	44-130	0-0	13.7-14.4#	53-53	5.4-5.4	60-64	246-223
	Pre-Mean				14.6	.40	21.12	28.3	7.54	39.4	
	Post-Mean	12-9			28.0	.40	18.94	34.9	6.83	41.1	

No. of tests administered (pre and post) was 70, No. of tests improved or remaining same was 53 (75.7%)

**The 600 R-W is stated in total seconds

(Latchaw Motor Achievement Test)

No.	Int.	BBWV.	VBWV.	SWV.	ST.	SBJ.	Sh. R.	V.J.
1.	K.C.	14-16	2-6	7-9	6-6	63-65	16.2-12.9	16-16
2.	P.D.	5-4#	1-0#	2-2	3-3	25-29	22.4-20.3	7-5#
3.	S.G.	1-2	0-0	1-2	2-1#	22-35	22.5-23.6#	7-7
4.	J.H.	3-7	0-0	2-2	2-1#	00-24	22.9-23.7#	3-7
5.	R.J.	3-3	0-1	3-4	1-2	21-24	25.0-23.0	4-7
6.	R.L.	4-7	1-1	4-5	2-2	19-19	24.2-24.9#	6-8
7.	M.M.	12-14	5-9	2-4	6-6	45-60	13.5-13.0	11-13
8.	R.N.	0-3	0-0	2-2	1-1	33-26#	21.2-22.9#	10-10
9.	D.N.	6-10	0-1	4-5	1-1	2-14	26.6-21.3	3-4
10.	N.S.	10-13	2-6	5-7	4-6	53-53	16.5-17.1#	10-10
	PreMean	5.8	1.1	3.2	2.8	28.3	21.10	7.7
	Post-Mean	7.9	2.4	4.2	2.9	34.9	20.27	8.7

No. of tests administered was 70, No. of tests improved or remaining the same was 59 (84.3%).

#Indicates regression

**AAHPER YOUTH FITNESS TEST BATTERY

Pull Up:

Rules: 1. All one trial unless a fair chance was denied.

2. The overhand grasp will be used and the body should not swing excessively during the movement. The chin must come over the bar and the arms should straighten out each time.

Scoring: Record the number of completed pull-ups to the nearest whole number.

Sit-up:

Rules: 1. The fingers must be in contac behind the neck.

2. Both elbows should make contact with both knees simultaneously in the "up" position.

3. The knees can raise slightly as this is possible with the ankles being held.

4. The back should be rounded and the head and elbows brought forward when sitting up as a "curl-up".

5. When returning to the back-lying position, elbows must be flat on the floor or mat before the boy attempts to sit-up again.

Scoring: Count the number of legally completed sit-ups. Do not allow the boy to rest. He must stop of his "own accord".

Shuttle-Run:

Rules: 1. The signal to begin is "ready go".

2. The boy picks up the first block, sets it down behind the line and then runs across the line with the second block.

3. Each boy is allowed two trials and be certain that at least five minutes elapse between the two trials.

4. Provide the boy with verbal assistance.

Scoring: Record the best of the two trials to the nearest tenth of a second.

Standing Broad Jump:

Rules: 1. The boy must be behind the restraining line, not on it!

2. Allow him three consecutive trials following one practice trial.

3. Measure from the outer edge of the take-off line to where the heel or other portion of the body touches nearest to that line.

Scoring: Record the best of three trials in feet and inches to the nearest inch.

25 Yard Dash:

Rules: 1. Two boys will run at the same time and two watches will be used.

2. The signal is "Are You Ready?, Go".

3. A downward sweep of the arm should accompany this signal (verbal).

4. It is recommended that the boys run to someone who is at least ten feet in advance of the finish line.

Scoring: Record the performance in seconds and tenths of a second.

600 Yard Run-Walk:

Rules: 1. No more than four boys should run at once and no less than two.

2. Every effort should be made to match the runners.

3. Four watches will be used and laps must be counted by the timer.

4. "Corner-cuts" result in disqualification.

Scoring: Record the time in minutes and to the nearest number of seconds.

Softball Throw for Distance:

Rules: 1. Each boy will receive three consecutive throws from behind the restraining line. In doing so the"totals" can be entered and "mix-ups" should not occur.

2. The ball is to be thrown overhanded and the boy must stay within the boundaries.

3. One practice throw is allowed!

Scoring: Record the best of three trials to the nearest foot.

ENCOURAGE THESE STUDENTS PRIOR TO PARTICIPATION AND RECOGNIZE EVEN MINIMAL SUCCESS FOLLOWING PARTICIPATION, HOWEVER, DO NOT ENCOURAGE THEM DURING THE ACTUAL TRIAL....

**Revisions for purposes of this study have been incorporated.

*LATCHAW MOTOR ACHIEVEMENT TEST

Basketball Wall Pass:

Rules: 1. The boy, from behind the restraining line, will receive a 15 second practice trial of passing the ball against the wall in a continuous manner.

2. He then receives two 15 second trials with the following stipulations:
   - a. If he steps over the line or if the ball hits a line on the wall or floor, the pass does not count in the total.
   - b. He may pass the ball in any fashion. He may catch it on bounce.
   - c. If he loses contril of the ball, he must retrieve it. The time does not stop.

Scoring: The best total of two trials is recorded.

Volleyball Wall Volley:

Rules: 1. The 15 second trial, the restraining lines, the wall boundaries and retrieving a loose ball are the same as above (see basketball).

2. The ball can be batted in any fashion and can be volleyed on the bounce or off the wall.

3. The boy begins by tossing the ball against the wall.

Scoring: Each legal volley counts one point and the best of four trials is recorded.

Vertical Jump:

Rules: 1. The boy will reach up and find the strip which is a true measure of his reaching height.

2. His first jump should insure success as this is important.

3. Efforts should be made thereafter to carefully estimate the probable jumping height so that there will not be excessive wasted "energy".

4. He must jump from directly under the strip and cannot "step-in".

Scoring: The number of the strip reached initially is recorded and subtracted from the number of the highest strip "tapped".

Standing Broad Jump: (See AAHPER Test)

Shuttle Run:

Rules: 1. The signal to begin will be "Go"!

2. The boy must make three round trips and must touch every line .

3. The clock is stopped when one foot has touched or crossed the finish.

Scoring: The time is recorded to the nearest tenth of a second; Verbal urging in terms of "what to do" is permitted during the run.

Soccer Wall Volley:

Rules: 1. The boy receives a 15 second trial after which time he receives four 15 second trials in succession.

2. The boy kicks the ball into the taped-off area from behind the restraining line and must retrieve any loose balls himself during which time he may use his hands.

3. Line balls do not count as successful hits and will be discounted.

Scoring: Record the best of the four trials.

Softball Repeated Throws:

Rules: 1. Each boy is allowed a 15 second practice trial which is followed by two 15 second trials.

2. A successful throw is counted when a boy throws the ball from within his restraining rectangle and the ball rebounds within the wall boundaries.

3. Line balls do not count and the boy must retrieve the ball if it gets away from him.

4. The method of throwing must be overhand.

Scoring: Record the best total resulting from one of the two trials.

PLEASE DO NOT ENCOURAGE A BOY WHILE HE IS PARTICIPATING IN THE ACTUAL EVENT. ENCOURAGE HIM PRIOR TO PARTICIPATION AND RECOGNIZE EVEN MINIMAL SUCCESS WHEN HE HAS COMPLETED A TRIAL!

* Revisions for purposes of this study have been incorporated...